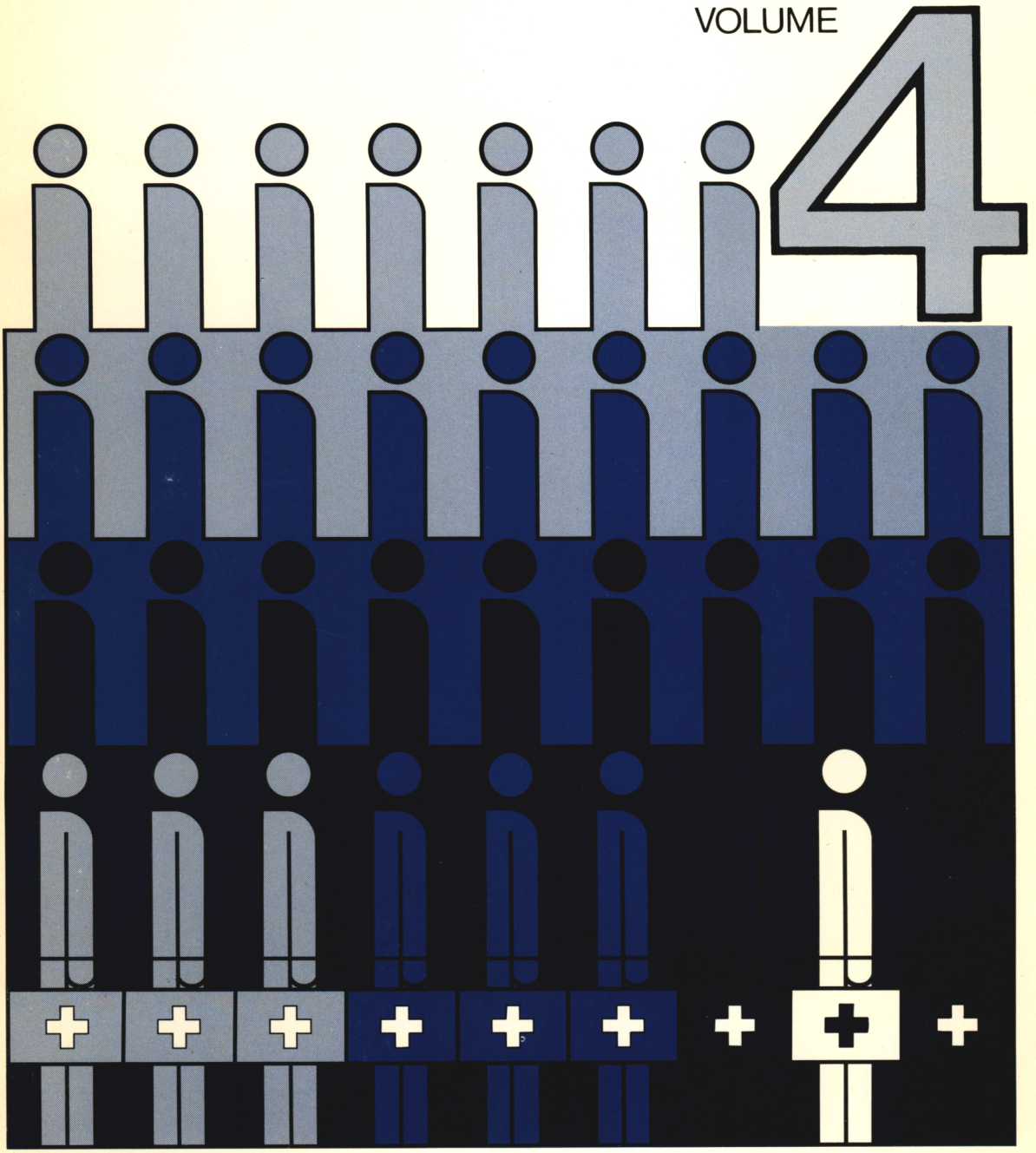
IDRC-125e

LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

Compiled by FRANCES M. DELANEY

VOLUME 4



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Volume 4

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Abstractors: Laurel Baltham*, Rosanna M. Bechtel, Arna Blum*, Hope Cadieux, Amy Chouinard, Esther Ehrlich de Vries, Maureen Gadd*, Elizabeth Struthers, and Jean Taylor*

**Appropriate Health Resources and Technologies Action Group Limited.*

(This is the fourth in a series of annotated bibliographies on low-cost rural health care and health manpower training. These volumes will be published irregularly.)

The International Development Research Centre is a public corporation created by the Parliament of Canada in 1970 to support research designed to adapt science and technology to the needs of developing countries. The Centre's activity is concentrated in five sectors: agriculture, food and nutrition sciences; health sciences; information sciences; social sciences; and communications. IDRC is financed solely by the Government of Canada; its policies, however, are set by an international Board of Governors. The Centre's headquarters are in Ottawa, Canada. Regional offices are located in Africa, Asia, Latin America, and the Middle East.

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Preface

This bibliography series is produced with the aid of a computer program that places each citation and abstract in the appropriate subject category, assigns reference numbers, and compiles the indexes. With the publication of each volume of the bibliography, we have gradually built up a machine-readable data base containing all the citations published in the printed series. We refer to this data base as SALUS. Beginning with Volume 5, which is already in preparation, we will incorporate this name into the title of the bibliography, which will then become: *SALUS: Low-Cost Rural Health Care and Health Manpower Training.*

SALUS is now being complemented by a file of the cited documents themselves on microfiche. From this file, we will be able to mail microfiche copies of requested documents to readers who would otherwise not have access to the original material. This service will be faster and more comprehensive than our present practice of providing photocopies of documents less than 30 pages long. However, we appeal to our readers to make exhaustive enquiries with their local libraries and booksellers before making use of the coupons (found at the back of this book) for requesting the assistance of IDRC.

Health-related institutions with suitable computing and copying facilities may now wish to use the SALUS data base, available on magnetic tape, and the accompanying microfiche file to provide complete bibliographic output services to their users. We are anxious to hear from such institutions, particularly those with international responsibilities or located in developing countries. In addition, we are interested in cooperating with institutions who could collect or contribute material to SALUS from their own libraries. Such institutions would probably be involved in health care delivery of the type described in the bibliography and would therefore be closer to the contributors and users of the information than we are in Ottawa. Eventually, we hope that the most appropriate institution could (possibly with IDRC assistance) take over full responsibility for managing SALUS, keeping it up-to-date, and providing services either directly or through a cooperative network. For more information, please consult our advertisement in *Salubritas* (vol. 2, no. 2) or write: *Project Manager, SALUS Bibliography, International Development Research Centre, P.O. Box 8500, Ottawa, Ontario, Canada K1G 3H9.*

This volume is the first that has been produced using a set of computer programs (MINISIS) prepared at IDRC and operated on an in-house mini-computer (Hewlett-Packard 3000).

We would like to thank the staff of the Appropriate Health Resources and Technologies Action Group Limited, London, UK, for choosing and abstracting documents from their collection for this and the following volumes of the series. We are especially grateful to Dr Katherine Elliott and Ms Arna Blum. AHRTAG abstractors who contributed to this volume are listed on the title page. We would also like to thank Mrs Esther Ehrlich de Vries, who collected and abstracted documents for us in Israel. In-house editorial and production work was done by Ms Rosanna M. Bechtel and Ms Amy Chouinard, with the invaluable assistance of Mrs Anita Firth.

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Abbreviations and Acronyms used in this series

ABU – Ahmadu Bello University, Zaria, Nigeria

ALERT – All Africa Leprosy and Rehabilitation Training Centre, Addis Ababa

ANM – Auxiliary Nurse-Midwife

APHA – American Public Health Association, Washington, D.C.

BCG – Bacillus Calmette-Guerin vaccine

CAHP – Coordinating Agency for Health Planning, New Delhi

CENDES — Centro de Estudios del Desarrollo, Venezuela

CENTO – Central Treaty Organization, Ankara

CFNI – Caribbean Food and Nutrition Institute, Kingston, Jamaica

CIDA – Canadian International Development Agency, Ottawa

CIIR – Catholic Institute for International Relations, London

CMAI – Christian Medical Association of India, Bangalore

CMC – Christian Medical Commission, Geneva

CPC – Carolina Population Center, Chapel Hill, N.C.

CSG – Capital Systems Group, Inc., Bethesda, Md.

CUSO – Canadian University Service Overseas, Ottawa

DANIDA – Danish International Development Agency, Copenhagen

DHEW – United States Department of Health, Education, and Welfare, Washington, D.C.

DMEIO — District Mass Education and Information Officer (India)

DPT — Diphtheria, Pertussis, Tetanus vaccine

Engl. – English

FAO – Food and Agriculture Organization, Rome

FP – Family Planning

Fren. – French

GPHCTC – Gondar Public Health College and Training Centre, Ethiopia

HSMHA – Health Services and Mental Health Administration, Washington, D.C.

IBRD – International Bank for Reconstruction and Development, Washington, D.C.

ICA – Colombian Agricultural Institute, Bogota

IDR – Institute of Development Research, Copenhagen

IDRC – International Development Research Centre, Ottawa

ILO – International Labour Organization, Geneva

IPPF – International Planned Parenthood Federation, London

IRHFP – Institute of Rural Health and Family Planning, Gandhigram, India

ITDG – Intermediate Technology Development Group, London

IUCD – Intrauterine Contraceptive Device

IUD – Intrauterine Device

KAP – Knowledge, Attitude, and Practice (Study)

KNIPOROS – Kenya-Netherlands-Israel Project for Operational Research in Outpatient Services, Kenya

LRCS – League of Red Cross Societies, Geneva

MCH – Maternal and Child Health

MEDLARS – Medical Literature Analysis and Retrieval Systems

MESH – Medical Subject Headings

NEAC – Nutrition Education Action Committee, Kingston, Jamaica

NIHAE — National Institute of Health, Administration, and Education, New Delhi

NTIS – National Technical Information Service, Washington, D.C.

OAS – Organization of American States, Washington, D.C.

OECD – Organization for Economic Cooperation and Development, Paris

OEO — Office of Economic Opportunity, San Francisco

PAHO – Pan American Health Organization, Washington, D.C.

Russ. – Russian

SIDA – Swedish International Development Authority, Stockholm

Span. – Spanish

TBA — Traditional Birth Attendant

UCLA – University of California, Los Angeles

UN – United Nations, New York

UNDP – United Nations Development Program, New York

UNESCO – United Nations Educational, Scientific and Cultural Organization, Paris

UNESOB – United Nations Economic and Social Office in Beirut, Beirut

UNFPA – United Nations Fund for Population Activities, New York

UNICEF – United Nations Children's Fund, New York

UNROD – United Nations Relief Operations in Dacca

USAID – United States Agency for International Development, Washington, D.C.

USGPO – United States Government Printing Office, Washington, D.C.

WHO – World Health Organization, Geneva

I. Reference Works

See also: 2768

2101 Bennett. J.F. Makerere Medical School. Kampala. *Publications of the Department of Preventive Medicine, 1959-1971.* Kampala. Makerere Medical School. Department of Preventive Medicine. Preventive Medicine Publications No.6. 1971. 1v.(various pagings). Engl.

This bibliography lists all publications of staff members of the Department of Preventive Medicine. Makerere Medical School. Kampala. Uganda. Citations range in date from 1959 to 1971 and include author. title. and source information. All publications are available from the Medical School. Author and subject index are included. (HC)

2102 Bourre, A.-L. South Pacific Commission. Noumea. *Annotated bibliography on medical research in the South Pacific: addendum no.2.* Noumea. New Caledonia. South Pacific Commission. Technical Paper No.142. Part 3. Addendum No.2. Jan 1974. 196p. Engl.

See also entry 2114.

Articles on health and medical research conducted in the South Pacific from 1962 to 1973 have been compiled and abstracted in this publication. The majority fall into the category of personal hygiene or public health – nutrition. dental health. rural health. epidemiology. pest control. infectious disease. etc. The remaining deal with anatomy. physiology. surgery. gynaecology. etc.. and include such items as investigations into mental diseases (suicide and peptic ulcer rates in some countries). blood disorders. cancer incidence. perinatal mortality. a folk remedy for filariasis. and shark-bite incidence (a study of 14 cases). Author and subject indexes are included and a list of journals indexed is appended. (HC)

2103 Christian Medical Commission. World Council of Churches, Geneva. *Contact.* Geneva. Christian Medical Commission. World Council of Churches. Engl.. Fren.

Contact. which is published six times a year by the World Council of Churches. examines the political. ethical. and social aspects of health care in developing countries. Launched in 1970. it has publicized successful health care programmes. such as Behrhorst Clinic in Guatemala. the Danfa Rural Health Project in Ghana. etc.. and has encouraged breast-feeding. self-care. and community development. Originally. it was published only in English but is now available in French as well. (AC)

2104 Elliott. K., ed(s). *Training of auxiliaries in health care: an annotated bibliography.* London. Intermediate Technology Publications. Aug 1975. 110p. Engl.

This annotated bibliography comprises more than 400 citations on teaching materials and background information for use in training auxiliaries. To help readers to obtain such material. the citations include source information. editorial comment. and. where possible. price. The book is divided into five sections: an alphabetical listing of individual and corporate contacts. materials for auxiliaries. materials for direct or indirect absorption into auxiliary teaching courses. general background material. and training centres and contacts country by country. Addresses of journals referred to in the bibliography are appended. (HC)

2105 Fries. B.E. *Bibliography of operations research in health-care systems.* Operations Research (Baltimore. Md.). 24(5). Sep-Oct 1976. 801-814. Engl.

This bibliography comprises 188 citations on operations research as it has been applied to health care delivery. They date up to March 1976 and include only articles on mathematical methods of modeling and solving decision problems that form the core of operations research. They are grouped into 15 categories: general and introductory. health status. health planning and programme evaluation. forecasting demand. hospital location. ambulance requirements and use. hospital occupancy. staffing. appointment systems. etc. Each article is listed alphabetically by author in as many categories as is suitable – for example. S.M. Lee's article "An aggregate resource allocation model for hospital administration" appears in a listing for staffing and one for miscellaneous. Author. title. journal. volume and number. pages. and year of publication are given for each entry. (AC)

2106 India. Ministry of Health and Family Planning. *India: country report for the inter-country training course on social science research methodology applied to health education in family health programmes.* New Delhi. Central Health Education Bureau. Directorate General of Health Services. Ministry of Health and Family Planning.

Technical Series No.27, 16 Oct 1973. 33p. Engl. Unpublished document.

Names of Indian institutions involved in family health education research, their training courses in research methodology, and their ongoing projects for the years 1971 and 1972 are listed in this compilation, which resulted from a WHO survey. Additional information on family health education projects within the government; availability of resource people in university departments, medical schools, ministries, international agencies, etc.; availability of technical support, such as data processing equipment, library bibliographic resources, trained interviewers, etc.; particularly significant research reports; basic research skills needed in the country; and major obstacles faced by researchers are included. Lists of medical colleges, universities with departments of social science, demographic research centres, communication action research centres, persons in charge of state health education offices, regional family planning training centres, and other relevant voluntary and private organizations are appended. (HC)

2107 **Jumba-Masagazi, A.H.** East African Academy, Nairobi. *Sociology of family health: a bibliography and a short commentary.* Nairobi, East African Academy, Information Circular No.5, May 1971. 120p. Engl.

This bibliography focuses on family health in East Africa; it incorporates information from applied and social sciences. Main topics are anthropology, social science, medicine, religion, economics, and nutrition. Most of the entries are articles that appeared in internationally known periodicals, but a few books have been included as well. Documents are listed alphabetically by author, editor, compiler, or sponsoring body. Bibliographical information, where possible, contains the author, title, source, publisher and city of publication, page numbers, and date. Entries range in publication date from 1876 to 1971 and number more than 2 000. Lists of abbreviations, publications, and selected addresses are also set forth. A short commentary introduces the bibliography and summarizes the principles that are underlined repeatedly by the citations. (AC)

2108 **Manning, D.H.** *Disaster technology: an annotated bibliography.* Oxford, Pergamon Press, 1976. 282p. Engl.

A collection of more than 450 citations, this bibliography provides sources for information on disaster relief and prevention in developing countries. It is divided into three main sections – the first contains most of the citations, the second reviews the limitations of the available literature and suggests areas of study, and the third comprises additional citations that were received and processed late. The book's citations, which include author, title, source, and abstract, are classified under one of seven categories: relief organization, planning for medical services, emergency care for medical problems, nutritional problems and aid, social and psychological disruption, general nonmedical planning, and earthquake management. Abstracts range in length from a single paragraph to several pages. Subject and author indexes are appended. (AC)

2109 **Martin, A.E., Kaloyanova, F., Maziarka, S.** WHO, Geneva. *Housing, the housing environment, and health: an annotated bibliography.* Geneva, WHO Offset Publication No.27, 1976. 113p. Engl.

See also entry 2319; also published in French.

In response to a WHO expert committee recommendation, this bibliography on housing and health was prepared. It contains citations for more than 450 documents, the majority of which have been annotated. The entries, which range in subject matter from air and water pollution through the medical consequences of housing disrepair and deterioration to insect infestation reflect the WHO committee's definition of housing. Thus, housing has been interpreted to mean dwellings and their immediate environment, i.e., pathways, streets, open spaces, shops, utilities, health centres, schools, etc. The bibliography concentrates on material published after 1960, but there are some articles that date back to 1920. Many of the entries are epidemiological studies that attempt to examine the effects on health of a specific environmental phenomenon. Citations include author, title, source, and date of publication. An index is appended. (AC)

2110 **Moore, J.A., Ojimba, M.** *Bibliography on nursing and midwifery in Africa.* Current Bibliography on African Affairs (Washington, D.C.), 9(2), 1976-1977, 140-159. Engl.

More than 350 publications on nursing and midwifery in Africa are cited in this bibliography; they range in publication date from 1928 to 1975 but fall mainly in the late 60s and early 70s. Their content spans the entire spectrum of nursing and midwifery, covering historical accounts, specific procedures, and changing roles, attitudes, etc. Citations for each publication indicate author, title, date of publication, publisher, and pages. (AC)

2111 **Pan American Health Organization, Washington, D.C.** *Annual report of the director: 1974.* **Washington, D.C., Pan American Health Organization, Aug 1975. 169p. Engl.**

Activities carried out by the Pan American Health Organization during 1974 are outlined. They are grouped under chapters on eradication or control of disease, engineering and environmental sciences (water supply, sewerage, solid waste disposal, etc.), health promotion, development of human resources, health planning, and research development and coordination. Other chapters list information and publications available from the organization, discuss the role of PAHO within the inter-American and United Nations systems and *vis-a-vis* other national and international institutions, and outline the organization and administration of PAHO itself. (HC)

2112 **Royal Society of Medicine, London.** *Tropical doctor.* London, Royal Society of Medicine. Engl.

The purpose of this quarterly journal is to publish contributions on prevention, management, and treatment of diseases prevalent in developing countries and to portray the problems faced by workers in remote areas and thus lessen their sense of isolation. The journal's management hope it constitutes continuing education in tropical medicine. One section, which is entitled "Any questions?," aims to provide authoritative answers to readers' questions. (HC)

2113 Sekou, H. India, Ministry of Health and Family Planning. *Selected bibliography of behavioural research in health and extension education in India.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, May 1969. 37p. Engl.

Conference on Review of Behavioural Research in Health and Extension Education, New Delhi, India, 19-29 May 1969.

Unpublished document.

This bibliography comprises studies conducted by behavioural scientists on subjects of interest to health educators and extension personnel in India including nutrition, community development, diffusion of agricultural innovations, health education, etc. Material is classified under: studies on health problems and determinants of health behaviour, methodology of extension education (programme planning, casework, individual contacts, leadership, group work, and community organization), communication and motivation, training and training methodology, and evaluation. More than 350 items are included. (HC)

2114 South Pacific Commission, Noumea. Bourre, A.-L., ed(s). *Annotated bibliography on medical research in the South Pacific: addendum no.4.* Noumea, New Caledonia, South Pacific Commission, Technical Paper No.142, Part 5, Jan 1976. 169p. Engl., Fren.

See also entry 2102.

This compilation is the fifth in a series of annotated bibliographies on medical research in the South Pacific. The references, which number more than 300, are culled from 150 medical periodicals, field reports by the South Pacific Commission specialists, and reports from national health departments. Abstracts are in the language of the original document (English or French). The references are classified under the headings physiology, personal hygiene, public health, treatment, diseases, surgery, and gynaecology, with the bulk of them appearing under public health. Author and subject indexes are appended. (HC)

2115 Taylor, C.M., Riddle, K.P., ed(s). *Annotated international bibliography of nutrition education: materials, resource personnel and agencies.* New York, Columbia University Press, Teachers College, 1971. 192p. Engl.

This bibliography comprises source material for persons establishing, managing, or participating in nutrition programmes in developing countries. Drawing from information available in 83 countries, it includes education materials, resource personnel, and nutrition agencies. Its contents have been classified into geographical regions or categorized as universal. The books, pamphlets, leaflets, and posters that are cited have been chosen for their usefulness in promoting nutrition programmes, suitability for a designated audience, accuracy, applicability, currency, availability, and special interest. Citations briefly describe education materials and detail title, author, source, number of pages, language (if other than English), and price. Subject and country indexes are included. (AC)

2116 U.K., Department of Health and Social Security. *Hospital abstracts.* London, Her Majesty's Stationery Office, 1976. Engl.

A bibliography with abstracts, this monthly series deals with the entire spectrum of services and personnel requirements of hospitals. It covers planning, design, and construction; engineering services; equipment and furniture; staff recruitment, training, supervision, and job descriptions; organization and administration; financing; catering; linen services; hygiene; etc. It also includes a section devoted to the patient's welfare, home care, etc. Citations are numbered consecutively and grouped according to subject matter. Each listing includes author, title, an English translation of the title where appropriate, source, volume number, date of publication, and page numbers. Abstracts accompany every citation and those referring to more than one section are cross-referenced; they range in length from about 50 to 300 words. An author index is appended to every issue and is supplemented at the end of the year by cumulative author and subject indexes. (AC)

2117 University of North Carolina, Chapel Hill. *Rapport; Journal du Projet des Centre Africains d'Enseignement des Sciences de la Sante: Rapport; African Health Training Institutions Project Newsletter.* Chapel Hill, University of North Carolina, Carolina Population Center and the Office of Medical Studies. Engl., Fren.

American and African health training associations cooperate to produce this bilingual newsletter, which aims to inform readers of innovations in teaching methods or curricula. The emphasis is on appropriate training for African health professionals (physician, nurse, or allied health worker) and the publication includes articles on family health, community medicine, interdisciplinary teaching, etc. It also reviews seminars, workshops, and conferences and details examples of interdisciplinary, regional, or international cooperation in health personnel training. (HC)

2118 WHO, Alexandria. *Annual report of the director: 1974-75.* Alexandria, WHO, 1975. 229p. Engl.

WHO regional activities in the Eastern Mediterranean during the year 1974-1975 included continued research and development studies of health services delivery systems, educational planning and technology, and major developments in the field of immunology. Also during

the year, WHO representatives undertook greater responsibility in individual countries in programme administration. Greater attention has been devoted to training auxiliary health workers, identifying and testing new programmed learning materials and teaching aids, incorporating psychiatric care into the total health system and using psychotropic drugs in the management of mental illness, and accommodating prevention in the present cancer infrastructure to protect against the environmental agents contributing to cancer. The proliferation and expense of drugs available for treatment in the region's countries were investigated. A country-by-country list of projects undertaken during 1974-1975 is annotated and set forth. (HC)

2119 **WHO, Geneva.** *Annotated bibliography of teaching-learning materials for schools of nursing and midwifery.* Geneva, WHO Offset Publication No.19, 1975. 446p. Engl., Fren., Span.
Also published in French and Spanish.

This multilingual bibliography on teaching aids for nursing incorporates more than 500 English, 200 French, and 200 Spanish documents and 250 English, 40 French, and 80 Spanish audiovisual aids. Citations are grouped under the language in which they are available and divided into printed and nonprinted materials. They cover community and family health, sciences, nursing care, nursing administration and management, nursing theory and trends, and research; they also comprise reference tools, source material, and selected and general bibliographies. Entries for printed materials include author, title, source, date of publication, number of pages, and, where possible, price and a brief review. For nonprinted materials, the title, date, producer, and distributor are given and in many cases technical details, price, and a summary and a description of target of the content are also set forth. Title indexes are presented for all the materials and an author index is included for printed matter. Directories of the names and addresses of publishers and film distributors are appended. (AC)

2120 **Wood, W.D., Campbell, H.F.** Queen's University, Kingston, Ont. *Cost-benefit analysis and the economics of investment in human resources: an annotated bibliography.* Kingston, Ont., Hanson and Edgar, 1970. 211p. Engl.
See also entry 2121.

This bibliography contains 389 citations and annotations for articles and monographs; it is divided into eight sections – the first four devoted to the theory of cost-benefit analysis and the last four to practical applications of the techniques to investments in human capital. It covers the economics of investing in health care, education and training, and social welfare programmes. Citations are listed alphabetically by author within each section and are numbered consecutively throughout the book. Bibliographic information includes a breakdown of the main headings within each document along with titles and source details. Abstracts range from 100 to 400 words; they describe the main ideas in each document and present the author's approach. The earliest entry is 1943 and the most recent, 1970. An author index is included. (AC)

2121 **Wood, W.D., Campbell, H.F.** *Health.* In Wood, W.D., Campbell, H.F., Cost-benefit Analysis and the Economics of Investment in Human Resources: an Annotated Bibliography, Queen's University, Kingston, Ont., 1970, 189-197. Engl.
See also entry 2208.

Twenty cost-benefit studies in the health field have been cited and annotated in this section of a bibliography on the economics of investment in human resources. The studies range in publication date from 1960 to 1968 and include general documents on health economics and specific ones, such as the gains to India of programmes for family planning. Citations are in alphabetical order by author and comprise author, title, source, main headings, and abstract. No information is provided on cost of documents. (AC)

II. Organization and Planning

II.1 Health Manpower

See also: 2117. 2148. 2150. 2159. 2172. 2203. 2205, 2218. 2223. 2234. 2236. 2241. 2332. 2452. 2463. 2480. 2486. 2498

2122 **Barton, W.L.** *Health team: problems of transition.* In Gould. G.C.. ed.. Health and Disease in Africa: the Community Approach. Nairobi. East African Literature Bureau, 1971. 10-16. Engl. Seventeenth Annual Scientific Conference of the East African Medical Research Council. Nairobi. Kenya. 1970.

For complete proceedings see entry 2753.

The author traces the history of medical practice to the present. explaining the background for the new move toward public health and noting that medical schools should reflect the current trends in medical practice. This means that planning for medical curricula should be influenced by the community's socioeconomic and cultural conditions, epidemiology. and existing health services as well as the desired orientation of the prospective doctor. Medical educators should recognize that a single physician can no longer master all the knowledge and that the health team can better provide the services once available from general practitioners. Consequently. they should give more attention to training physicians for interaction with a team. so that they may learn to supervise and work with auxiliaries. The author discusses the factors to be considered in the design of an integrated model for local health services. including such aspects as personnel. epidemiology. demography. communications. public attitudes. and projected growth patterns. (RMB)

2123 **Barton, W.L., Dowling, M.A.** *Human resources in tropical health programmes: some aspects of long-term planning and staff training.* Royal Society of Tropical Medicine and Hygiene (London), 63(2). 1969. 155-170. Engl. 13 refs.

See also entry 393 (volume 1).

A method for accurately forecasting manpower needs and production is proposed with a view to facilitating health manpower planning in developing countries. The method recognizes four planning units: the district health unit. the provincial/national health planning unit. the medical school and training centre unit. and the central health planning unit. The first is responsible for organizing and planning all local medical care units and estimating the number of patients who will be referred to the facilities under the provincial/national unit. The second unit is responsible for organizing the provincial and national referral hospitals. specialized units. and disease control projects. The third planning unit is responsible for overseeing the numbers of students entering each health discipline and the last is responsible for policy making and data collection. Mathematical formulas for quantifying parameters that affect manpower needs and production. such as population growth. rise in life expectancy. annual student attrition rate. time lapse between completion of studies and commencement of service. etc.. are proposed and some are expanded in the appendices. (AC)

2124 **Bhatla, P.C.** *I.M.A.'s views on medical and health care in urban areas.* Journal of the Indian Medical Association (Calcutta). 61. Dec 1973. 482-484. Engl.

Despite the fact that some 25 000 recent medical graduates are unemployed in India. the rural doctor-per-population ratio is still only 1:10 000 and rural primary health centres are seriously understaffed. Although the target for 1974 was to staff 5 400 primary health centres with two doctors each. only 2 500 had two doctors by that date: 2 200 had one doctor: 150 had no doctors: and 205 centres remained to be established. The solution to this problem. according to the Indian Medical Association. is to harness the total qualified medical manpower through suitably phased programmes. The IMA suggests mobilizing qualified private practitioners into government service on a part-time basis until such time as finances allow their full-time government employment: strengthening and upgrading the primary health centre complex by providing it with doctors. equipment. drugs. and paramedical personnel: and introducing a rural bias into medical education. Other suggestions include the training of multipurpose middle-level auxiliaries: the deployment of multipurpose mobile teams of medical and auxiliary personnel in rural areas: and. eventually. nationalization of the health services. The association feels that through these efforts a national average of 1 physician per 3 000 population and a rural average of 1:5 000-6 000 is possible by 1979. (HC)

2125 **Central Treaty Organization, Ankara.** *CENTO Conference on Training of Auxiliary Health Personnel: Turkey. Iran and Pakistan: proceedings.* Ankara. Office of U.S. Economic

Coordinator for CENTO Affairs, 1968. 93p. Engl.
CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Turkey, 30 Jan-4 Feb 1967.
Individual articles have been abstracted separately under entries 2126, 2127, 2128, 2129, and 2137.

This document contains a discussion of the findings of a preliminary survey of the training, deployment, supervision, future, etc., of auxiliary health workers in Iran, Pakistan, and Turkey; background information on the same subjects from the three countries in question; and a report of proceedings and recommendations arising from a conference on auxiliary personnel. Extensive data on training institutions and number of personnel being produced in each country are included. (HC)

2126 Central Treaty Organization, Ankara. *Report of the CENTO Conference on Training of Auxiliary Health Personnel.* In Central Treaty Organization, CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Office of U.S. Economic Coordinator for CENTO Affairs, 1968, 19-30. Engl.
CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Turkey, 30 Jan-4 Feb 1967.
For complete proceedings see entry 2125.

Following a discussion of the categorization, training, deployment, and supervision of auxiliary health workers in Iran, Pakistan, and Turkey, at the CENTO conference on the training of auxiliary health personnel in 1967, the participants agreed that auxiliaries should enjoy permanent status, multipurpose workers are desirable for each basic discipline but not as a new category, overall health manpower planning of the CENTO countries should include auxiliary health personnel, regional training centres would be impracticable in view of language barriers and cultural differences and therefore should not be established, attention should be paid to the conditions of service (remuneration, status, benefits, refresher training, etc.) of auxiliaries, formation of an association for auxiliary health personnel should be encouraged, and supervision (either constant in the form of regular visits from a superior, or on demand) of auxiliaries is essential. Among other recommendations, it was urged that further consideration be given the preparation of vocabulary for CENTO-region auxiliary personnel, that an interregional exchange of teaching and reference material for auxiliaries be arranged, and that CENTO-region countries consider passing new legislation regarding auxiliary health personnel. (HC)

2127 Central Treaty Organization, Ankara. *Background paper by the government of Iran.* In Central Treaty Organization, CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Office of U.S. Economic Coordinator for CENTO Affairs, 1968, 31-50. Engl.
CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Turkey, 30 Jan-4 Feb 1967.
For complete proceedings see entry 2125.

At present, Iran is seeking to staff its recently established network of health centres with qualified technical personnel. Formal training courses are available to auxiliaries in the areas of environmental health, nursing, laboratory work, malaria eradication, midwifery, etc., and the expansion of both ancillary and auxiliary training facilities is foreseen in the fourth 5-year plan (1968-1973). Rural health care is currently provided by mobile teams of health corpsmen, i.e., conscripts who do medical service in lieu of military service. Each medical team comprises one physician, two or three secondary school graduates trained as medical aides, and a driver. Technical services required by the team are provided by mobile laboratory, health education, dentistry, pharmacy, and sanitation units. The numbers of personnel involved in each unit and in the health corps are noted and statistical data regarding other categories of health personnel are appended. (HC)

2128 Central Treaty Organization, Ankara. *Background paper by the government of Pakistan.* In Central Treaty Organization, CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Office of U.S. Economic Coordinator for CENTO Affairs, 1968, 51-69. Engl.
CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Turkey, 30 Jan-4 Feb 1967.
For complete proceedings see entry 2125.

Pakistan's facilities for training medical and auxiliary personnel include 12 medical colleges, 4 dental colleges, 2 colleges offering postgraduate (specialist) education, 26 schools of nursing, and 8 lady health visitor training schools. Midwives, nurses' aides, laboratory technicians, X-ray technicians, multipurpose technicians (for deployment in rural health centres), and compounder/pharmacists are trained in hospitals or, in the case of the multipurpose technicians, in special training schools. A long-term programme, which includes the third 5-year plan, aims to raise the current health worker-per-population ratio from 1:6 300 to 1:3 000 for physicians, from 1:25 000 to 1:4 500 for nurses, and from 1:34 000 to 1:10 000 for lady health visitors within the next 20 years. Accordingly, two more medical colleges, six more schools of nursing, and two more lady health visitor training institutions are in the planning stages. Lists of projects foreseen in the third 5-year plan and lists of training centres by category of personnel are annexed. (HC)

2129 Central Treaty Organization, Ankara. *Organization of health services in Turkey.* In Central Treaty Organization, CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Office of U.S. Economic Coordinator for CENTO Affairs, 1968, 71-88. Engl.
CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Turkey, 30 Jan-4 Feb

1967.

For complete proceedings see entry 2125.

The training facilities. admission requirements. job descriptions. and numbers of auxiliary health workers in Turkey are described in this presentation to a 1967 CENTO conference on auxiliary health personnel. Auxiliaries in Turkey include junior nurses. nurses' aides. midwives. village midwives. health officers (employed in communicable disease control. environmental programmes. etc.. and in hospitals caring for male patients). environmental health technicians (employed in the enforcement of housing. water. food. and sanitary requirements). laboratory technicians. and radiology technicians. Village midwives are trained in a vocational school upon completion of primary school; other midwives are trained in a health college following graduation from junior high school. Junior nurses. midwives. and health officers are eligible for entrance to senior nursing schools or health training institutes after 3 years of work experience. The number of auxiliaries required for preventive programmes (by 1977) has been set at six times the present number. so continuation and expansion of present training efforts are essential. Statistical data on present and planned therapeutic and preventive facilities are appended. (HC)

2130 Dorozynski, A. *Doctors and healers.* Ottawa. International Development Research Centre. 1975. 63p. Engl., Fren.

The author demonstrates how the widespread adoption of Western medicine has resulted in a health care vacuum in the developing world. The Western view that the physician is the sole purveyor of health care has been transplanted to the developing countries. even though the technology and the system of incentives essential to the physician's practice are virtually nonexistent there. As a result. the many medical schools that have sprung up in the developing world do not actually produce more health personnel for the underserved nations but rather sustain a constant flow of doctors to the more affluent countries. The cost of this phenomenon. which the author calls foreign aid in reverse. has been calculated as $45 billion over the past 20 years. The nature of disease in the developing countries. alternative forms of health care delivery. and the type of commitment necessary to their implementation are explored. (HC)

2131 Dowling, M.A., Guilbert, J.J., Katz, F.M. WHO. Geneva. *Making educational programmes relevant.* WHO Chronicle (Geneva). 30(11). Nov 1976. 464-467. Engl.

Also published in French, Russian. and Spanish.

The authors call for educational planners to design health manpower training programmes that are relevant to the objectives of the health services. At present. new educational programmes are based on existing models that are not necessarily suited to the needs of the community. sensitive to its culture, or compatible with its resources. The result is that students and teachers often view schooling as an obstacle to be overcome in joining a profession. This attitude militates against a student's continuing education beyond graduation. A more reasonable educational model. which comprises five steps. is suggested. The steps are to assess the present health status of the population: ascertain the social. economic. and demographic factors: identify the needed services: isolate the competence needed to provide the services; and ensure that the learners understand how each learning activity relates to the final goal of professional competence. (AC)

2132 Gish, O. Swedish International Development Authority. Stockholm. *Medical auxiliaries: a programme of expansion.* Stockholm. SIDA. Health and Nutrition Unit. 10 May 1972. 11p. Engl.

Unpublished document.

A 34-point plan for changing the health manpower structure in Tanzania from its current top-heavy form (a doctor/medical assistant/rural medical aid ratio of 2:1:2) to the more appropriate pyramidal structure (a ratio of 1:2:4) by 1980 is outlined. Implicit in the plan is that priority be placed on auxiliary rather than physician training. The process would involve the construction of 11 new schools for training rural medical aids and full production on the part of the four existing medical assistant schools. Some changes in present policy could improve production rates: the 3-year training course for rural medical aids could be reduced to 2 years: in view of their growing numbers. students with more than the requisite number of years schooling could be admitted into a modified (perhaps shortened) rural medical aid course: language of instruction could be Kiswahili instead of English: the whole medical assistant and rural medical aid training programme could be organized under the auspices of a director of medical auxiliary services; etc. The cost of training and deploying the requisite number of all three cadres by 1980 is projected and deemed feasible. provided hospital expenditures are contained. Budgetary and other considerations are set forth in eight tables. (HC)

2133 Guilbert, J.J. *Teacher training for medical schools in Africa.* Lancet (London). 2(7880). 7 Sep 1974. 570-573. Engl. 21 refs.

Improved teacher training is vital to medical education in Africa. It should be made available to greater numbers of teachers and should be reoriented toward producing agents of change for a new. more appropriate medical education. In the past. the World Health Organization has provided groundwork in teacher training by preparing full-time members of the African Teacher Training Centre to become directors of local centres and by organizing interregional seminars (1971 and 1972) for top level administrators from schools of health personnel: encouraged exchange between professors of health sciences (1968. 1970. and 1972) for the purpose of drawing up an integrated programme of medical studies and proposing methods of implementing it: sponsored a biannual series of meetings of deans of the medical schools of the region for discussions on facilities; launched an intercountry project (1969) to supply schools with educational material. textbooks.

and laboratory equipment; etc. However, a new orientation in medical education requires drastic changes of attitudes among the present faculty who control curriculum; therefore, it is likely that changes will come slowly. (HC)

2134 Hornby, P., Mejia, A., Ray, D., Simeonov, L.A. *Trends in planning for health manpower.* WHO Chronicle (Geneva), 30(11), Nov 1976, 447-454. Engl.

Also published in French, Russian, and Spanish.

Health manpower planning is the systematic organizing of goals, objectives, priorities, and activities of manpower development to ensure adequate staffing for health services. It takes into account staffing requirements, recruitment, utilization patterns, training, attrition (leaving practice before retirement), and retirement. All these variables are interrelated and each represents potential for improving the health manpower picture. In the last decade, health manpower studies and planning have become a major priority of most countries and two types of study have dominated: (1) large-scale inquiries to improve the quality of information or data on manpower and (2) analyses of available information on manpower that seek to improve decision-making. Both types ultimately aim at improved health manpower plans, but the former is usually time-consuming and costly and often produces information that is not relevant to decision-making, whereas the latter offers some basis for immediate planning and points out deficiencies in available data. The two types are not mutually exclusive and in fact should be combined so that available data are analyzed for immediate interventions in manpower patterns and more extensive study undertaken where data are shown to be deficient. (AC)

2135 Indonesia, Ministry of Health. *Example of simple manual for studies of the activities of nurse-midwives and some result of its application in five provinces in Indonesia.* Jakarta, Bureau of Statistics and Evaluation, Ministry of Health, n.d. 38p. Engl.

Unpublished document.

A method is outlined for conducting job analysis studies of nurses and midwives practicing in Indonesia health facilities. Job analysis studies aim to obtain accurate data upon which to base suggestions for more efficient utilization of these workers, in-service education programmes, and possible curriculum revisions. Briefly, the method calls for a trained observer to watch the health worker during working hours and record each task and its duration. Tasks are classified as service or support. Data are recorded on an observation schedule and then transferred to special forms for analysis. Thirty observation days are considered adequate for drawing conclusions with reasonable accuracy. Samples of the various forms in use and some of the results of past applications of this method are appended. It is suggested that a revised form of the method could be used to evaluate other types of health workers. (HC)

2136 Jelliffe, D.B. *Paediatric practice in tropical regions.* Lancet (London), 31 July 1965, 229-231. Engl.

This discussion of pediatric practice in tropical regions emphasizes the challenge of effectively using limited resources to combat high child morbidity and mortality. Curative care offered by hospitals and outpatient clinics is a necessary but limited element of a child health service; it offers relief and paves the way for acceptance of preventive measures, which, through health education, should be the major emphasis of the service. When mothers attend clinics or wards with their children, they should learn how to prevent recurring malnutrition, etc., and the pediatrician must create time and interest for this instruction by streamlining examination procedures, standardizing treatments, and securing the cooperation of other medical personnel, teachers, and public servants. The last should not be difficult if the training of these workers has emphasized preventive health practices as well as curative care in the treatment of child health problems. (ES)

2137 Lichtenwaner, C.S. Central Treaty Organization, Ankara. *Report of a survey on training of auxiliary health personnel in Turkey, Iran and Pakistan.* In Central Treaty Organization, CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Office of U.S. Economic Coordinator for CENTO Affairs, 1968, 3-18. Engl.

CENTO Conference on Training of Auxiliary Health Personnel, Ankara, Turkey, 30 Jan-4 Feb 1967.

For complete proceedings see entry 2125.

Prior to the Central Treaty Organization's conference on the training of auxiliary health personnel in 1967, the author conducted a preliminary survey of health manpower and health manpower training programmes in Turkey, Iran, and Pakistan. Training facilities, admission requirements, and course duration for nurses, midwives, sanitarians, medical laboratory technicians, pharmacists, administrators, and single-purpose auxiliaries are briefly outlined and efforts toward overcoming manpower shortages are described. These include Turkey's health colleges system, which offers training in nursing, midwifery, laboratory techniques, X-ray techniques, and environmental sanitation to middle school (eighth grade) graduates; the development of a cadre of multipurpose male community health workers in Turkey; the training of a highly respected multipurpose female health worker, called a Lady Health Visitor, in Pakistan; and the 18-months auxiliary and paramedical training programmes offered to matriculated students in Pakistan. Recommendations for conference format, based on the survey results, follow. (HC)

2138 Lopez-Vidal, E. Pan American Health Organization, Washington, D.C. *Health care for the dispersed rural population.* Bulletin of the Pan American Health Organization (Washington, D.C.), 63(6), Dec 1967, 1-7. Engl.

A general plan, adaptable to the geographic, economic, and sociocultural conditions of Latin America, is proposed as a means to extend health services to the rural population. It relies on the use of indigenous health auxiliaries and the participation of public servants, such as policemen and teachers. The plan calls for the training of health auxiliaries to be geared to the educational level of the local populations and to include study of first aid, treatment of common diseases, and motivational techniques for nutrition, hygiene, and sanitary practices. Training would be the responsibility of regional hospitals and the auxiliaries would belong to an integrated structure, supervised by their nurse-teachers. Their duties would include primary health care and collection of morbidity and mortality statistics. This latter responsibility would provide data, which, although vital to devising comprehensive health plans, are lacking for most of these countries. Public servants would be involved in health education courses and urged to provide a good example in the construction of sanitary facilities. (ES)

2139 **Mamujee, A.M.** *Medical manpower problems in Commonwealth countries: Tanzania.* CMA Bulletin (London), Nov 1972, 7-10. Engl.

The problem of training sufficient doctors to serve in developing countries is discussed with particular reference to Tanzania and other Commonwealth countries. These countries, which have inherited an inappropriate tradition of medical education, face the continuous exodus of medical personnel. Although many aspire to a system of socialized medicine similar to that found in Britain, they only have the economic resources to implement a rudimentary health system. Their present priorities should be a detailed study of health manpower needs and cross-national cooperation in health planning, reorientation of physicians' attitudes through educational policies adapted to national needs, improvement of physicians' working conditions in their own countries by the strengthening of national medical associations, and increased training of paramedical workers. The valuable contribution of the medical assistant in Tanzania, Kenya, Zambia, Uganda, etc., is cited in support of the last suggestion. (HC)

2140 **Sandosham, A.A.** *Medical manpower in a rapidly expanding population.* Medical Journal of Malaya (Singapore), 23(2), 2 Dec 1968, 146-151. Engl.

Various features of the medical profession in Malaysia are discussed in the light of the country's growing need for medical and health personnel. The present physician-to-population ratio is 1:5 000 and the population is growing faster than the country's ability to educate physicians. Malaysia has one medical school with an annual capacity of 120 new students, adheres to the same standards as those recognized by the General Medical Council of the United Kingdom, allows limited recruitment of foreign doctors, has made some (unpopular) attempts to post doctors to rural areas, faces similar shortages of support and paramedical staff, and envisions a rural health programme that it is unable to implement for want of staff. The country has not suffered greatly from a "brain drain," although bureaucratic delays, unsuitable appointments, and the arbitrary attitudes of senior members of the profession have driven some young graduates away. The author offers no solutions to these problems but suggests that the country must decide what sort of health service it wants and what direction the medical profession must take to achieve it. (HC)

2141 **WHO, Geneva.** *UNICEF/WHO Joint Committee on Health Policy: report on the eighteenth session.* In Official Records of the World Health Organization No.195, Annex 2, Geneva, WHO, Aug 1971, 18-48. Engl.

Also published in French, Russian, and Spanish.

The 18th session of the WHO/UNICEF Joint Committee on Health Policy met in 1971 to consider a report on assisted education and training programmes. The report, which was based on visits by five consultants to the six WHO regions and nine countries receiving international aid, suggested that future training programmes emphasize planning, programming, and evaluation; teacher training; auxiliary training for work in rural areas; refresher and continuing training planned to coincide with the special needs of each country; and incentives for professional and auxiliary staff to work in rural areas. These recommendations were discussed by the committee and the need for preventive medicine in all levels of medical training was recognized. The committee also considered the effects of a new outbreak of cholera and methods to control it. The fluoridation of water and the results of experiments with a new quadruple vaccine designed to prevent diphtheria/pertussis/tetanus/heat-killed typhoid were also discussed. (ES)

2142 **WHO, Geneva.** *Staffing of dental services.* WHO Chronicle (Geneva), 22(4), Apr 1968, 142-145. Engl.

WHO Inter-Regional Seminar on the Training and Utilization of Dental Personnel in Developing Countries, New Delhi, India, 5-11 Dec 1967.

Also published in French, Russian, and Spanish.

Papers and group discussions from a WHO seminar on the training and utilization of dental personnel in developing countries are summarized. The primary and secondary aims of the seminar were to establish a unified but flexible approach to dental training and to provide a comprehensive guide to the development of national dental services and dental education programmes. Discussions covered the criteria for assessing dental manpower needs, the development of a list of treatment priorities, the types and functions of dental personnel, steps in evolving a national plan for education and services, the education and training of the dental team, and the trend toward community dental health. Three main groups of dental personnel – the professional, the operating auxiliary, and the nonoperating auxiliary – are identified and the scope of auxiliary activities delineated as follows: operating auxiliaries work under the supervision of a professional,

performing simple dental examinations and procedures, and nonoperating auxiliaries confine themselves to receiving and preparing patients, sterilizing instruments, etc. It was agreed that, wherever possible, professionals and operating auxiliaries should be trained together to foster the team approach. The various steps for planning to meet manpower requirements are listed. (HC)

2143 **WHO, Geneva.** *World shortage of medical manpower.* WHO Chronicle (Geneva), 19(2), Feb 1965, 47-55. Engl.

Also published in French, Russian, and Spanish.

According to WHO experts, there is a shortage of medical manpower in Africa, the Americas, South East Asia, the eastern Mediterranean, and the western Pacific regions. This shortage is due in all cases to inadequate education facilities and the deterioration in the quality of teaching, duplication of health and social services complicated by a lack of cooperation between government ministries and institutions, and disorganized planning programmes conducted by inefficient administrations. WHO's solution to these problems is to provide existing schools with increased assistance, which could be used to improve staffs, to plan curricula based on social and environmental health problems, to improve their administrations, and to direct research activities. The establishment of new schools for training health auxiliaries and the provision of more fellowship awards for both basic and postgraduate professionals are other projects aimed at increasing the number of medical personnel in developing countries. (ES)

2144 **WHO, Geneva.** *Special courses for national staff with higher administrative responsibilities in the health services: report of a WHO study group.* Geneva, WHO Technical Report Series No.311, 1965. 31p. Engl.

A WHO study group met in 1964 to examine the educational needs of persons assuming responsibility in national health administrations. The group discussed programmes both for those who have had no previous training in public health and for those who have the customary postgraduate training in public health but who require supplementary training. The study group recommended the introduction of various types of short courses (orientation and refresher courses, seminars, traveling seminars, and fellowships) but favoured educating as many persons as possible in schools of public health or other institutions for formal training. They concluded that, in future, health services administration must be regarded as a specialty within public health and medical students should be encouraged to make a career of it. Examples of the various course possibilities are shown in five annexes and courses offered in Geneva to senior professional staff of WHO are briefly described in a sixth. (HC)

II.2 Organization and Administration

See also: 2144, 2212, 2214, 2215, 2229, 2230, 2234, 2235, 2236, 2245, 2251, 2253, 2254, 2255, 2263, 2332, 2394, 2436, 2447,2490, 2536, 2571, 2669, 2672, 2677, 2683, 2686, 2720, 2795

2145 **Adetuyibi, A., Familusi, J.B.** *Teaching hospitals and their administration in developing countries: suggestions for future improvement.* East African Medical Journal (Nairobi), 53(10), Oct 1976, 601-603. Engl.

Teaching hospitals, which have recently proliferated in developing countries, often function ineffectively because of poor administrative frameworks; a model for administration that would eliminate the present problems is suggested. It is based on a single unit of authority that comprises several semi-autonomous departments. The departments are training services, personnel (staff services), estates (building and facilities), finance, and hospital services (catering, pharmacy, records, laundry, etc.). Each department could be headed by someone with administrative ability, but the subdepartments, such as catering, should be headed by specialists. (AC)

2146 **Alba, M.S.** *Nursing in national development.* Philippine Journal of Nursing (Manila), 45(1), Jan-Mar 1976, 11-16. Engl.

The current 4-year development plan in the Philippines recognizes improvement of the quality of life as its main goal; the emphasis is on providing the rural population with adequate education, health services, and housing. In the field of health, the plan aims for improved hospitals and hospital administration, coordination of government and private health efforts, greater outreach for preventive and curative services, and more nutrition programmes. The plan's designers are urging all members of the community to participate in attainment of the goals and are encouraging health workers especially to pursue national development. For example, nurses are asked to serve the rural areas and to gear nurse education toward responsible tasks that have in the past been reserved to medical personnel. In return for cooperation, nurses are promised greater recognition as a profession. (AC)

2147 **American Public Health Association, New York.** *History of the health care system in Chile.* American Journal of Public Health (New York), 67(1), Jan 1977, 31-36. Engl. 50 refs.

In Chile, the election of a socialist party under the direction of Salvador Allende marked a new era in health care for the poor. The system of services, which was a regionalized network of hospitals, health centres, and health posts remained the same, but the new government aimed its resources toward extending coverage, shifting expenditures from costly tertiary care to primary health care, and promoting community participation. The government increased milk distribution so

that the programme benefited about 70% of the country's pregnant women and children under age 15. Neighbourhood health councils were given greater power in decisions on health services and programmes offering free health services were expanded. These developments alienated many physicians and in 1972 their licensing body supported the first nationwide strike – the incident that eventually led to the military coup and Allende's death. The change in government precipitated a turnaround in the health sector – the budget was sliced by 20%, the provision of free health services was cut off, and the Ministry of Public Health was empowered with all health decision-making. But the Allende government's accomplishments in the health status of the poor were considerable between Dec 1970 and Oct 1973: the incidence of malnutrition in children under age 6 declined by about 17%, infant mortality sharply decreased, and other mortality indices indicated similar trends. (AC)

2148 Baasher, T.A. *Survey of mental health services in the eastern Mediterranean countries.* Tropical and Geographical Medicine (Haarlem), 28(1), Mar 1976, 65-71. Engl. 17 refs.

The development of mental health services in the Middle East is closely associated with economic growth, which itself may be a cause of mental illness. Patterns of illness are characterized by a predominance of schizophrenia and the prevalence of drug abuse and dependency. At present, there are no modern outpatient services for the majority of the people and almost no facilities for treating the criminally insane. On average, Middle East countries have one to two psychiatric hospitals and there are few psychiatric wards within general hospitals. Some relief could be provided by traditional healers if they could be utilized to educate the public, refer patients, and conduct rehabilitation programmes at existing traditional healing centres. In addition, mental health services could be integrated into all levels of the health services infrastructure so that patients could be identified before they become seriously ill. This integration would require reorienting health manpower to regard mental health as a priority and the establishment of an effective, centrally organized health care system with emphasis on outpatient care instead of institutionalization. (RMB)

2149 Baldo, J.I. *Venezuelan program in "simplified medicine."* New York, Josiah Macy, Jr. Foundation, n.d. 12p. Engl.

International Macy Conference, Medical Assistant in Latin America, Lima, Peru, 23-25 Jan 1969.

Unpublished document.

The Venezuelan programme of simplified medicine is defined as "the provision of basic health services to rural populations by means of auxiliary medical personnel within a framework of services." The framework is simple: the country is divided into health districts with a health centre each. The health centres are staffed by professionals and are equipped to provide radiology, laboratory, inpatient, and some specialist services. They also serve as referral units for health subcentres, which are directed by general practitioners. The subcentres serve populations of 2 000-5 000 inhabitants, whereas health stations staffed by auxiliaries serve smaller populations. The auxiliaries are locally recruited, practically trained women who provide primary care and supervise traditional empirical midwives. Each level of service is dependent on the next and supervisory and referral channels function well. Success has largely been due to postgraduate courses given to the physicians-in-charge to prepare them for the role of health team leader. A schematic representation of a health district and an outline of the curriculum are set forth. (HC)

2150 Biddulph, J. *Visit to People's Republic of China.* Papua New Guinea Medical Journal (Port Moresby), 16(2), Jun 1973, 139-143. Engl.

A Papua New Guinea resident visiting the People's Republic of China notes the improvements in health since 1949: the remarkable drop in infant mortality (from 117/1 000 to 30/1 000), the reduction in cases of malaria and schistosomiasis, the lowered prevalence of tuberculosis in urban areas (from 5% to 0.2%), the total eradication of venereal diseases and malnutrition, and the introduction of a family planning programme that may achieve an annual growth rate of 1% within 25 years. These successes are due to the Chinese health system's integration with general economic and social development planning; its preventive approach, evidenced by almost total immunization coverage; its extension into the rural areas where 80% of the people live; its reliance on auxiliaries; its mixture of Chinese and Western medical practices, which not only cuts down on treatment costs but also makes therapy more familiar and hence more acceptable to those in rural areas; its trend away from specialized role models in medical education and its discouragement of privileged status for physicians; its dependence on consumers for implementing and financing health programmes, etc. The author concludes that some of these features might well be applied in Papua New Guinea, a country that produces fewer results but spends 10 times the amount spent in China. (HC)

2151 Browne, S.G. *Comprehensive medical care delivery through a church-related rural health programme in the former Belgian Congo.* Contact (Geneva), Occasional Paper No.6, Dec 1971, 5-12. Engl.

The work of Baptist medical missionaries in the Yakusu medical district of the former Belgian Congo (Zaire) began with the establishment of a hospital in 1921. The hospital's early efforts focused on the eradication of endemic disease but later broadened to include comprehensive health care for the entire district. In 1935, a school for nurses and auxiliary midwives was established to staff the mission hospital and to extend services through 18 dispensaries-cum-health-centres and 36 treatment centres. Each dispensary is staffed by a nurse and an auxiliary midwife and has 26 beds, outpatient facilities, and a microscope for performing simple diagnostic examinations. Its activities include an annual

medical examination of the entire population, school health, weekly child health and antenatal clinics, weekly visits to treatment centres, and nutrition education. A doctor from the hospital visits the dispensaries once every 6 weeks to see referrals, supervise record keeping, and provide informal refresher courses. This comprehensive system of health care now serves a population of 45 000 at an annual cost of less than U.S. $2 per person. (HC)

2152 Bulletin of the International Union against Tuberculosis, Paris. *Role, activities and difficulties of the national tuberculosis associations.* Bulletin of the International Union against Tuberculosis (Paris), 48, Dec 1973, Suppl., 199-217. Engl.
Third Regional Conference on Tuberculosis, Ouagadougou, Upper Volta, 4-5 Dec 1972.

Representatives of voluntary national tuberculosis associations in Togo, Niger, Nigeria, Mali, Ivory Coast, and France discussed the role of nongovernmental associations and their relationship with the government, the patient, and the public; public health legislation governing tuberculosis; the need for public education regarding tuberculosis; the role of national associations in establishing local associations; the merits of training volunteers to diagnose and treat tuberculosis; and sources of funding for volunteer associations. All participants agreed that national associations have an extremely important role to play in disseminating information; catalyzing or complementing government efforts at tuberculosis control, especially in rural areas; and ensuring patient follow-up. (HC)

2153 Camerlain, M. *Nouveaux axes de l'action medicale et sanitaire dans la Chine en construction. (New trends in the health and sanitary care in the People's Republic of China).* Union Medicale du Canada (Montreal), 105(11), Nov 1976, 1638-1641. Fren.

Chinese medicine has been transformed in its essence and its orientation in the last 25 years. The author reviews three new concepts that have altered the medical and sanitary care in China: the emergence of the barefoot doctor, the cooperative medical systems, and the mobile medical teams. This report is based on observations made during a 14-week stay in the People's Republic of China. (Journal abstract.)

2154 Chen, W.Y. *Relation of occupational health to general community health.* In Quinn, J.R., ed., China Medicine as We Saw It, Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(NIH) 75-684, 1974, 247-257. Engl. 18 refs.
See also entries 2193, 2260, 2435, and 2501.

Because present development in the People's Republic of China depends entirely on labour-intensive industry, the health of its workers is a priority and its occupational health services are comprehensive and accessible. Occupational health services in the rural areas are those provided to agricultural workers in communes. Virtually all levels of care are available within each commune. There is a hospital staffed by physicians, nurses, physiotherapists, pharmacists, X-ray technicians, and auxiliaries who combine talents to care for patients referred to them from the brigade medical stations. The brigade stations are staffed by a medical leader and several barefoot doctors, who have undertaken short courses in first aid, acupuncture, diagnostic technique, and drug prescribing. Occupational health services in the cities are those for the small industries that support agricultural output. They are organized in much the same way as rural services, except that the barefoot doctor is called a factory doctor and is trained to meet the needs of the factory workers. Both rural and urban workers pay a small fee for health care, but retired persons receive care at no charge. Women are allowed 56 days maternity leave with pay for a normal delivery and given time from work to feed their newborns. Nurseries are located on the premises for factory workers and child care in rural areas is readily available. (AC)

2155 Christian Medical Commission, World Council of Churches, Geneva. *Health care in China: an introduction.* Geneva, Christian Medical Commission, World Council of Churches, 1974. 140p. Engl.

The Christian Medical Commission produced this study to emphasize Chinese experiences that might be of value to communities in other cultures and social systems. Separate chapters cover health and national development goals, health care organization, epidemic disease control, population policy, traditional and Western medical practices, and health manpower. Appropriate excerpts from Chinese and foreign documents reinforce major theses. Included are an appendix dealing with the prevention and treatment of mental illness and an annotated bibliography containing 20 references. (RMB)

2156 Conacher, D.G. *Medical care in Ethiopia.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 70(2), 1976, 141-144. Engl. 18 refs.

This article reviews the history of health services in Ethiopia and describes the disease patterns in the country since 1958, including major outbreaks of malaria, yellow fever, and cholera. It notes that at present malnutrition ranks as the principal cause of pediatric death. Social and economic aspects of the population are discussed, with statistical data on fertility, mortality, growth, ethnic distribution, and occupation. Ethiopia's ratios of doctors, nurses, and hospital beds per patient are among the lowest in Africa. Most of the population, especially in remote areas, is served by some 100 rural health centres and 450 rural health stations. The most common health worker is the dresser, who may also function as a rural drug vendor (of antibiotics) with or without government sanction. Programmes for environmental sanitation, maternal child health, smallpox eradication, etc., are being developed by the Ministry of Health. (RMB)

2157 **Cuba, Ministerio de Salud Publica.** *Bioestadistica. (Biostatistics).* Havana, Centro Nacional de Informacion de Ciencias Medicas, Jan 1974. 137p. Span.

This is the first in a projected series of publications by the statistical division of the Cuban Ministry of Public Health on the related topics of statistics, demography, and computer science. This issue includes sections on community diagnosis as an instrument of public health, the numbers and distribution of doctors and paramedical personnel and their effect on the health levels of the general population, the construction of vital statistics graphs for the study of population samples, perinatal mortality in the Eusebio Hernandez maternity hospital in Marianao, and statistical data on mortality and cause of death of Cubans under age 15 since 1962. A 1973 calendar of the Ministry's activities is appended. (RMB)

2158 **Danielson, R.** *Cuban health area and polyclinic: organizational focus in an emerging system.* Inquiry (Chicago), 12(2), Jun 1975, Suppl., 86-102. Engl. 43 refs.

For complete document see entry 2196.

The Cuban health service is composed of four organizational levels – local, regional, provincial, and national – that constitute a hierarchy of backup services, resource networks, planning capabilities, and mechanisms of coordination. National health personnel are responsible for monitoring the service's ability to meet established norms and those at the regional and area levels are responsible for implementing programmes. The system's focus is the area polyclinic. This is an administratively independent body that provides clinical, environmental, community health, and social services to a defined population. In addition, it establishes, orients, and safeguards the population's relationship with hospital and specialist services. The polyclinic's role in the health system and in the community is discussed and its historical roots are traced. (HC)

2159 **Donahue, J.E., Anders, J.Z.** Pan American Health Organization, Washington, D.C. WHO, Geneva. *National system for the maintenance of health care facilities.* In Research in Progress 1976, Washington, D.C., Pan American Health Organization, Department of Research Development and Coordination, 1976, 351-352. Engl.

For complete document see entry 2776.

In 1972, Venezuela established a system to maintain health equipment and facilities and to develop maintenance procedures and personnel. The system operates at four levels: central, regional, subregional, and local. The functions of each level are clearly defined, as are the organizational structures, management components, student selection procedures, training, technical assistance, and maintenance manuals. To date, training programmes have been defined, all necessary technical manuals have been formulated, and comprehensive technical courses in electrical systems, hospital maintenance and engineering, refrigeration and air conditioning, boiler operation, emergency power plants, environmental sanitation, sterilization equipment, and laundry supervision have been instituted. The programme is the first of its kind in Latin America and it has made policymakers in other countries aware of the need for proper maintenance of health care facilities. (HC)

2160 **Doron, H., Ron, A.** Kupat Holim, Tel Aviv. *Organizational structure of Kupat Holim services according to regionalization and integration.* Kupat Holim Yearbook (Tel Aviv), 3, 1974, 9-23. Engl.

This article contains proposals for reorganization of the services offered by the General Federation of Labour in Israel; it calls for one authority to administer all the services in a region and for the country to adopt plans for integrating mental health services, preventive and curative care, nursing, and rehabilitation services. At present the health services are divided into four categories: ambulatory services, general hospital services, mental health services, and rehabilitative and chronic disease services. The ambulatory services comprise family or general practice, primary pediatric care, and specialty services. Hospitalization is organized to some extent on an area basis, but no definite division by region exists. Of the three psychiatric hospitals, one is a teaching hospital, to which a district psychiatric clinic has been affiliated and the region's mental health ambulatory services have been added. (EE)

2161 **Erasmus, C.A.** *State and comprehensive health services: Republic of South Africa.* Central African Journal of Medicine (Salisbury), 21(3), Mar 1975, 59-64. Engl. 8 refs.

The South African Department of Health strives to provide the Bantu homelands with comprehensive family care despite such difficulties as water shortages, lack of communications and roads, scattered populations, insufficient sanitation, and the influence of tribal customs and beliefs. Before 1970, the only available medical care in these areas was provided by the mission hospitals; the few private physicians served only whites. The Department of Health decided to utilize these mission hospitals to supervise a proposed network of community health centres. These centres would provide maternal child health services, immunization, home visiting, health education, rehabilitation, and outpatient care for surgical, psychiatric, and geriatric patients. The author describes the hierarchical administration of the planned health services and notes that the responsibility will eventually be undertaken by the Bantu themselves. (RMB)

2162 **Flahault, D.** WHO, Geneva. *Integrated and functional team for primary health care.* WHO Chronicle (Geneva), 30(11), Nov 1976, 442-446. Engl.

Also published in French, Russian, and Spanish.

The primary health team, including workers in rural hospitals, health centres, and village health services or dispensaries, coordinates its programmes to meet the needs of the population it serves; each member should be aware of his duties and how they relate to the team effort. The overall setup should be a network of referral and supervision. At the village level a model system would comprise a team leader and an assistant – one responsible for sanitation and one for maternal child health; at the health centre level a medical assistant or nurse as team leader, an auxiliary medical assistant, one or two midwvies, public health technicians, dental, laboratory, etc., technicians, and a few aides; and at the most specialized level – the rural hospital – two physicians (one of whom would be leader) and support personnel. (AC)

2163 **Forster, E.B.** *Forensic attitudes in the delivery of mental health care in Ghana.* Ghana Medical Journal (Accra), 10(1), Mar 1971, 52-55. Engl.

Mental health services in Ghana advanced little from 1888 (the first ordinance to provide for custody of "lunatics") to 1970; however, a new mental health act was proposed in 1971. It was aimed at giving maximum encouragement to patients suffering from mental illness or disability, ensuring adequate restraint and safeguards where patients were confined for treatment, and eliminating the word lunatic from discussions of mental health. It incorporated changes in admission, discharge, and segregation policies. Proposed admissions changes revolved around the certificate of confinement; the main alteration was the introduction of a time limit for the first confinement: patients would be reevaluated by a doctor and the magistrate within 2 years. Discharge changes were that patients who had escaped and remained at large for 3 months would be automatically discharged, that the director of medical services could discharge any patient on the recommendation of the doctor in charge of the psychiatric hospital, and that the magistrate could discharge a patient on the application of relatives who would assume responsibility or on the application of a patient who has voluntarily confined himself. (AC)

2164 **Frei, E.** *Political realities of health in a developing nation.* In Cahill, K.M., ed., Health and Development, Maryknoll, N.Y., Orbis Books, 1976, 4-14. Engl.

For complete document see entry 2212.

A former president of Chile discusses the difficulties of establishing health care priorities in developing countries, especially because health improvements are often the result of indirect investment (in nutrition, education, environmental sanitation, etc.) as opposed to direct investment in medicine. In his opinion, the best formula is massive, low-cost public health action combined with a few highly specialized centres for which spending is regulated and planned by government working with medical associations. The author believes that the public, rather than the private, sector can most effectively allocate present health resources and recommends that all doctors be incorporated into a national health system. He cites earlier successes of national efforts in the sector, such as the reduction in drug costs effected when Chile founded a state laboratory to produce medicines under their generic names and the campaign against illegal abortion. In closing, he stresses that all health programmes should have as their primary goal the social, rather than the economic, development of the nation. (RMB)

2165 **Gujral, V.V., Gangrade, S.** *Pediatric rehabilitation: problems, scope, planning, and organisation.* Indian Pediatrics (Calcutta), 12(3), Mar 1975, 239-246. Engl. 8 refs.

Because 4% of all children in India suffer from some form of disability, it is recommended that hospital pediatric units be expanded to include pediatric rehabilitation departments. Such departments would deal with the early diagnosis, assessment, and management of handicapped children. The aim would be to help them attain their maximum physical, social, and emotional potential. Suggestions for the department include ensuring that it is large enough to accommodate referrals from surrounding areas, that space for best quality care is provided, that flooring is nonskid and easily maintained, that doors are wide and equipped with metal kickplates, that toilets are large with doors opening outward, that a technical person is employed to maintain equipment, etc. As a complementary measure, a massive campaign should be mounted to educate the public in the prevention of congenital and acquired defects and in the availability of rehabilitation services. It is concluded that 90% of all handicapped children can, with proper management, become independent enough for gainful employment. Suggestions are based on the experience of the Department of Physical Medicine and Rehabilitation, Kalavati Saran Children's Hospital, New Delhi. (HC)

2166 **Hirschhorn, N.** *Health in Bangladesh.* In Relief Problems in Bangladesh: Hearing before the Subcommittee to Investigate Problems Connected with Refugees and Escapees, Appendix VII, Washington, D.C., U.S. Government Printing Office, 2 Feb 1972, 161-166. Engl.

See also entry 860 (volume 2).

Health problems in Bangladesh, which range from the effects of natural disaster to malnutrition, infectious diseases, and heart disease, must be controlled systematically and successfully before family planning measures will prove acceptable. At present, families must plan to have six children to ensure that one son will survive to adulthood and provide security for his parents. If infant and child mortality were reduced through positive health measures, however, the need for many children and the waste in human and edible resources that is brought about by death would be eliminated. Necessary measures include a system of emergency health services for cyclones and other disasters, supplemental feeding programmes for mothers and children, intensive agricultural production and research, vaccination, and the introduction of a low-cost rehydration method for patients with diarrhea. (AC)

2167 **Karefa-Smart. J.** *Relevance for developing countries of the Chinese experience in the health field.* Rural Life (Herts. UK). 19(2). 1974. 12-14. 32-33. Engl.

The author points out some similarities between the developing countries and prerevolutionary China (i.e., poverty. maldistribution of health services. paucity of health manpower. prevalence of infectious diseases. poor nutrition. and lack of sanitation). outlines China's methods for dealing with these problems. and examines their applicability to other countries. The outstanding accomplishments of the Chinese methods. he observes. are that poverty has been abolished. health education has been effectively widespread. participation in policy-formation and decision-making has been extended to all. and the system has been developed entirely within available resources. He concludes that. while neither the Chinese nor the Western experience should be copied slavishly. the former holds three important lessons for developing countries: the changes that led to the abolition of poverty were based on firm ideological commitment to establishing equality for all: it is necessary to find indigenous solutions that will be less costly and more acceptable than imported ones; and finally. the mere existence of a model such as China is inspiring evidence of the possibility of finding alternative (as opposed to Western) solutions to health problems. (HC)

2168 **Kaser. M.** *Health care in the Soviet Union and Eastern Europe.* London. Croom Helm. 1976. 278p. Engl. Refs.

The author reviews the history and present status of health services in the USSR. Bulgaria. Czechoslovakia. the German Democratic Republic. Hungary. Poland. and Romania. He gathered information from a few official sources but supplemented his data through documentary research and personal communications. He visited all the countries at least once and found that all offered comprehensive health services at relatively low cost. He comments that health care costs in these countries are quite low but that costs are held down because the salaries are low too (women make up 72% of health personnel and their low salaries have been cited as examples of sex discrimination). The author's findings for each country are divided into legislation and policy. demographic pattern. health conditions. health services administration. health care facilities. and finances. Statistical data are tabulated. (AC)

2169 **Korn. J.** *Report from the health sector of the People's Republic of Mozambique.* Copenhagen. Ministry of the Environment. 1976. 1v.(various pagings). Engl.
Unpublished document.

From 12-21 February 1976. the author visited Mozambique. conducted interviews with resource and Ministry of Health personnel. and recorded observations. The results of that visit have been reported in this document for the Danish World University Service Committee. The information comprises a background of the country's population. geography. and politics: an overview of health priorities and problems: a summary of the author's visits to health institutions: and his impressions of health aid politics. Appendices list resource personnel and literature and set forth the visitor's itinerary. (AC)

2170 **Kruse. W.** *Primary health care: a new partnership?* Development and Cooperation (Bonn. Germany). 1. 12 Jan 1977. 24-25. Engl.

Recently. the World Health Organization reoriented its health aid from hospital-centred care to decentralized units of primary health care. It has incorporated seven principles that mean greater involvement of recipient peoples: to fashion care to fit the life and customs of target groups. to integrate financial aid into national health services. to coordinate health projects with other development aid. to ask target groups to set priorities. to utilize existing resources. to invest in comprehensive care. and to support health activities at the lowest and simplest institutional level. The overall objective of the WHO change is to form partnerships with developing societies so that funds will be used to initiate affordable health care systems. This objective demands that personnel. who implement such partnerships at the local level. be schooled in cooperation. (AC)

2171 **Labeyrie. E.** *Travail sanitaire rural et prevention. (Rural health care and prevention).* Gazette Medicale de France (Paris). 84(10). 1977. 1031-1035. Fren.

The author maintains that the Chinese health care system is not the result of a unified development plan but rather of a series of unique solutions to individual problems that were later reinforced and coordinated into a system. The first of these solutions was the use of massive. publicly supported health campaigns to combat epidemic diseases. The techniques originally used against venereal diseases were later extended to other disease control campaigns and the author describes the methods used to detect and treat cancer of the esophagus. endemic goitre. and chronic bronchitis. The second solution. to the problem of lack of trained medical personnel. was the training and deployment of barefoot doctors. one of whom is described in a vignette. In order to solve the third problem. that of health care funding. the Chinese have organized brigade-commune cooperatives to buy medicines and equipment. which the author compares to the democratic French system. (RMB)

2172 **McCord. C.** Christian Medical Commission. World Council of Churches. Geneva. *Companiganj Rural Health Project: a joint venture between government and voluntary agencies.* Contact (Geneva). 34. Aug 1976. 1-9. Engl., Fren.

A community rural health project in Bangladesh illustrates the problems of providing effective health care in a politically unstable. impoverished country. The project was planned in 1972 with the assistance of the World Council of Churches and implemented in 1975. The focus is a rural population of 120 000. 50% of

whom live on 4% of the land. Malnutrition and infectious diseases are prevalent and mortality high. In preparation for the project, existing health programmes were centralized under one administration and the district health centre expanded to include a small hospital ward. Local health units specializing in MCH and family planning programmes were established and the training of local health auxiliaries was initiated. In addition, international agencies funded an evaluation unit to collect morbidity and mortality data and the utilization rates of health and family planning services. The training programmes recruited local women as home visitors and medical assistants and reoriented existing field workers toward integrated health services. The home visitors encouraged attendance at the MCH clinics and motivated 90% of the family planning acceptors. Thus far, efforts to improve disease control, family planning, and clinic utilization have proved successful, whereas nutrition programmes have failed to win wide acceptance. The project has suffered some setbacks in dealing with community leaders who are facing political crises, famine, and poverty, but it is hoped that increased public education will eliminate the difficulties and improve acceptance of immunization, disease detection, and training programmes. Relevant data, including costs and effectiveness, are collected in tables. (ES)

2173 **Newell, K.W., King, M.H., Saroso, J.S.** WHO, Geneva. *Health care package.* WHO Chronicle (Geneva), 29(1), Jan 1975, 12-18. Engl.

Also published in French, Russian, and Spanish.

A health care package is defined as an integrated set of components for the improvement of health care under specific socioeconomic conditions; designing a health care package involves isolating a particular service area (e.g., child care in the health centre), considering in detail actions and interventions, and incorporating this information into manuals, equipment lists, curricula, teaching aids, examinations for training workers, etc. The manuals are the heart of the package and they must be simple enough to be understood by the lowest level of worker yet comprehensive enough to be useful to professionals. The time and skills involved in preparing packages are expended only once and the results can be easily transferred. The one drawback is that countries must ensure continuing supplies and equipment. (HC)

2174 **Niger. Ministere de la Sante Publique et des Affaires Sociales.** *Seminaire sur la Protection Familiale et la Formation du Personnel Paramedical, 21 jan 1974-9 fev 1974, Niamey. (Seminar on Family Health and Paramedical Training, 21 Jan 1974-9 Feb 1974, Niamey).* Niamey, Ministere de la Sante Publique et des Affaires Sociales, n.d. 26p. Fren.

Seminar on Family Health and Paramedical Training, Niamey, Niger, 21 Jan-9 Feb 1974.

Unpublished document.

An epidemiological profile of the Republic of Niger is presented and the structure of its health services outlined as background to a comprehensive discussion of health care in the rural areas. As in most developing countries, Niger's health services are concentrated in the cities, leaving the rural population (in this case 95%) served by an inadequate network of health centres and dispensaries. The network is complemented by a mobile medical team, whose efforts are costly but epidemiologically valuable, and a number of educational and preventive programmes sponsored by the government or voluntary or international organizations. One such programme is the training of village pharmacy auxiliaries. The village pharmacists, who are volunteers chosen by the villagers, are trained to provide basic care, administer medicaments, educate the public on health, and cooperate in mass campaigns and the transfer of seriously ill patients. They are under the supervision of the nearest dispensary nurse, who visits every 15-30 days, and the head of the health centre, who visits every 2 months. They receive a 10-day refresher course annually. Results of this programme have so far been encouraging; in areas where regular supervision has been maintained, village pharmacists have proved capable of handling 50% of all complaints. Additional information regarding numbers of personnel, curricula, preventive and educational programmes, health administration, etc., is presented in the text and in tables. (HC)

2175 **Oluwande, P.A., Onibokun, A.G.** *Some aspects of public health and medical care in China.* East African Medical Journal (Nairobi), 53(10), Oct 1976, 590-595. Engl. 11 refs.

The experience of the People's Republic of China cannot be adopted wholesale by other countries, but there are some general principles that might be widely applied. For instance, there are seven priorities upon which the whole health system is based and these are just as appropriate in Asia, Africa, and Latin America as they are in China. They are: to promote health, to reach rural areas, to decentralize basic health care and make it labour intensive, to grant equal status to Western and traditional medicine, to follow up all health care measures with education, to integrate health services with local labour systems, and to engage in medical research only if it serves the masses. The amazing progress in China made possible by implementing these concepts can be seen in child health, environmental health, nutritional status, and disease control. (AC)

2176 **Pan American Health Organization, Santiago.** *Servicios basicos de salud. (Basic health services).* Santiago, Pan American Health Organization, Aug 1971. 28p. Span.

Based on the document "Basic Health Services," WHO/PHA/69.39.

This PAHO document describes the organization, administration, and implementation of basic health services, which are defined implicitly as a network of national, regional, and local health care facilities of all

types and degrees of sophistication staffed by both professional and auxiliary personnel in whatever arrangement is appropriate for serving the health care needs of a particular population. Citing examples from different countries, the document is divided into separate sections that discuss specific health care workers who can best be utilized in the fields of preventive medicine, maternal child health, environmental health, health education, immunization, nutrition, mental health, and epidemiological activities at the local level. The functions and facilities of the intermediate and national levels of the network are outlined and suggestions for the implementation of such a system are given. (RMB)

2177 Pan American Health Organization, Washington, D.C. *Health conditions in the Americas 1969-1972.* Washington, D.C., Pan American Health Organization, Scientific Publication No.287, 1974. 226p. Engl.

Statistical data for the years 1969-1972 for the Americas have been collected and displayed in this publication. Information was gathered from annual questionnaires sent out by WHO and PAHO requesting natality, mortality, morbidity, vaccinations, health resources, and health services figures. Other sources were national publications and official reports. The book is divided into seven chapters: population, vital statistics, communicable diseases, health services, hospitals, environmental health, and health manpower. The data provide a firm base for planning future health services and expenditures and for evaluating the objectives of the 1961 Charter of Punta del Este. For example, the charter called for increases in life expectancy of 5 years for developing country inhabitants and this objective was accomplished in Chile, Colombia, Ecuador, El Salvador, Mexico, Peru, and Panama. Guatemala reported the lowest life expectancy, but information was not available from many of the study areas. Seven appendices are included; they correspond to the chapter headings and contain tables of all the statistics gathered. (AC)

2178 Pan American Health Organization, Washington, D.C. *Methods for increasing health service coverage in rural areas: final report of the technical discussions.* In Boletin de la Oficina Sanitaria Panamericana: English Edition Selections from 1968, Washington, D.C., PAHO, 1969, 1-3. Engl.

Seventeenth Meeting of the Directing Council of the Pan American Health Organization, Port of Spain, Trinidad and Tobago, 6-7 Oct 1967.

Also appeared in Spanish in Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 64(1), Jan 1968, 1-5.

At the 17th meeting of the Directing Council of the Pan American Health Organization, participants discussed ways of increasing health services in rural areas of Latin America. During the discussion it was noted that: the interrelatedness of social and economic problems in rural areas makes a comprehensive approach to their solution mandatory; access to health services must not be made conditional on an individual's ability to pay for them; community development is the process whereby the people join with government authorities to improve the economic, social, and cultural conditions of communities; governments should approach international lending agencies for the financing of health programmes in rural areas; the general health services should be regionalized and their personnel coordinated in suburban and rural areas to form self-sufficient regions; minimum rural health activities should include disease prevention, health promotion, and the collection of basic health information; locally recruited and trained auxiliaries should be deployed in rural areas; and students in the health professions should be acquainted with the theory and practice of utilizing auxiliaries. (HC)

2179 Papua New Guinea, Department of Public Health. *Syllabus of the course for the diploma in health service administration.* Port Moresby, Department of Public Health, Dec 1972. 71p. Engl. Unpublished document.

A 1-year course in health services administration, which consists of approximately 1 000 teaching hours, is open to employees of the Papua New Guinea Department of Public Health and others who have gained administrative or clerical experience. Subject matter has been selected to allow maximum flexibility in graduate placement and covers national government; management and communications; human behaviour and learning; personnel management and industrial relations; bookkeeping and public accounting; planning, design, and maintenance of health institutions; health legislation; and medical records and statistics. The objectives, content, student activities, and expected outcome of training are described and the yearly timetable of courses, allocation of teaching hours, and the names of lecturers are included. (HC)

2180 Park, R.M. *Not better lives, just fewer people; the ideology of population control.* International Journal of Health Services (Westport, Conn.), 4(4), 1974, 691-700. Engl. 19 refs.

At a time of increasing government involvement in and popular support for limitation of the world's population, this article critically analyzes population control. The socioeconomic basis of desirable family size for the world's working peoples is reviewed and the intent of population programmes is described. Underlying assumptions and choices of world population planners, as reflected in economic development strategies and political power, are outlined. Overpopulation is interpreted as a consequence, not a cause, of problems which themselves must be attacked in spite of entrenched elites who seek to secure the current order. The damaging role of population propaganda and the importance of eliminating sexist and racist ideas in a programme for basic development alternatives are emphasized. Specific actions are proposed for the health care field. (Modified author abstract.)

2181 **Pridan, D.** Israel, Ministry of Health. *Health services of Gaza and Sinai, 1973.* In Pridan, D., Health Services Judaea and Samaria, Gaza and Sinai, Jerusalem, Ministry of Health, Military Headquarters, Department of Health, 1973, 27-30. Engl.

See also entries 2254, 2256, and 2323.

Training of personnel, improvement and expansion of facilities, and reorganization were the main objectives of the health services of the Gaza Strip and the Sinai in 1973. At year end, the two existing hospitals in Gaza, one in the north and one in the south, had expanded their services, added small medical reference libraries, and were aiding peripheral areas and overseeing 14 clinics and maternal child health centres. In the central Sinai, two mobile units were serving 12 Bedouin centres; in the north, one mobile clinic and two permanent clinics were operating. In the southern Sinai, three new first-aid stations had been established, bringing the total to 14. Health personnel training programmes for the area had also been expanded, seminars were being offered by local and Israeli specialists, and some personnel had been sent abroad to continue their education. Other activities of the health services included a campaign to improve the garbage disposal system, food and water inspection and treatment, and deployment of 12 health educators to promote sanitary facilities and to encourage preventive measures against infant malnutrition. Special problems facing the services during the year were an outbreak of 27 cases of poliomyelitis and a severe shortage of nursing personnel. Figures are given for live and still births and infants' deaths in the area, infectious diseases, and the number of patients treated in hospitals in Israel. (EE)

2182 **Risse, G.B., ed(s).** *Modern China and traditional Chinese medicine: a symposium held at the University of Wisconsin, Madison.* Springfield, Ill., Charles C. Thomas, 1973. 167p. Engl. Refs.

Symposium on Modern China and Traditional Chinese Medicine, Madison, Wisc., Apr 1972.

In April 1972, the University of Wisconsin (USA) celebrated its 25th anniversary by holding a symposium on traditional Chinese medicine and health care delivery in postrevolutionary China. The published proceedings comprise discussions on acupuncture techniques, acupuncture analgesia and its physiological basis, barefoot doctors, and the effects of mass participation in health care. A bibliography that comprises 45 items from 1921 to 1972 is included and an index is appended. (AC)

2183 **Roemer, M.I.** *Organizational issues relating to medical priorities in Latin America.* Social Science and Medicine (Oxford), 9, Feb 1975, 93-96. Engl.

The author identifies seven systems of health care in Latin America and traces their historical development. These systems include: traditional medicine, serving some 17% of the rural population and 3-4% of urban inhabitants; charity hospitals for the poor; ministry of health programmes, including public health measures and health facilities; social insurance schemes covering industrial or white-collar workers; military and police services; services provided by large and isolated (usually foreign-owned) enterprises for employees and their families; and private practices utilized mainly by the affluent. The author notes a pattern whereby health services, which have been developed to serve the interests of one social class, generate demands in another and are eventually extended by those in power to avoid confrontation. He further notes that health services do not threaten the existing structure and in fact provide a means for it to make visible social reforms – a fact that health leaders should exploit in their struggle to bring health care to disadvantaged urban and rural dwellers. (HC)

2184 **Samarasinghe, C.E.** *Importance of integrating the tuberculosis control programme with the basic health services.* Bulletin of the International Union against Tuberculosis (Paris), 48, Dec 1973, Suppl., 190-192. Engl.

The case for integrating tuberculosis treatment with the general health services is put forward. In many countries, according to the author, BCG campaigns have not been effective because they were not executed as long-term measures and considerable administrative costs have been incurred as a result of the separation between survey and control activities. The author feels that advances in chemotherapy and available knowledge of the methods of tuberculosis screening now enable developing countries to implement programmes that suit local resources, e.g., in an urban setting, screening equipment may be an X-ray unit and in a rural area, a microscope. He recommends that existing health personnel be trained in tuberculosis control and that specialized supervisory staff and equipment be attached to general health facilities. He cites the Ghanaian experience as an example of how this can be accomplished. (HC)

2185 **Seah, S.K.** *Health care in the People's Republic of China.* Canadian Journal of Public Health (Ottawa), 66(1), Jan-Feb 1975, 56-60. Engl.

The key to the health care delivery system of the People's Republic of China is the decentralization of health services with a network for referral. A chain of responsibility descends from the Ministry of Health through various revolutionary committees to the barefoot doctor in the rural production brigade, the worker doctor in the urban factory, and the neighbourhood red guard doctor – a housewife responsible for disease and birth control among the families on her block. The lower-level auxiliaries are briefly trained and are supervised by mobile medical teams. Physician training, which at one time took 6 years, now is 3 years with a 2-year internship. Medical students are chosen and supported by their communities on the basis of their suitable attitudes and political beliefs. Graduates are expected to return to the sponsoring communities. Traditional and Western medicine are melded in the medical curriculum and complement one another. Hospitals of traditional medicine exist and the author briefly describes an

urban example. However, the author does not feel that the Chinese health system is viable outside its unique social and political context. Figures illustrating the chain of responsibility, rural health care organization, and urban health care organization are included. (RMB)

2186 **Segall, M.** *Health and national liberation in the People's Republic of Mozambique.* International Journal of Health Services (Westport, Conn.), 7(2), 1977, 319-325. Engl.

At the time of independence, September 1975, Mozambique's medical resources consisted of 85 Portuguese doctors, relatively extensive medical facilities in the largest towns, and no facilities at all for the widely scattered rural majority. Since then, all facilities have been nationalized and a rural health service consisting of health posts and maternity and child care units (a few beds each), health centres (about 20 beds each), and rural hospitals (100 beds each) has been organized. Facilities are staffed by appropriately trained auxiliary nurses or midwives, public health agents, and medical technicians. An additional health worker, the community health promoter, is responsible for health education and health promotion and constitutes the key link between villager and health service. So far the government has launched a number of preventive campaigns, such as the one to provide every rural home with its own pit latrine, and opened three schools for training rural health workers. The faculty of medicine in Maputo is to be continued, although its curriculum is currently under review. (HC)

2187 **Shehu, U.** WHO, Brazzaville. *Health care in rural areas.* Brazzaville, WHO AFRO Technical Papers No.10, 1975. 64p. Engl.

Background paper for the technical discussion of the 24th session of the WHO Regional Committee for Africa.

The author reviews the major health problems in the WHO African Region, briefly describes the available health services, and outlines components of a basic health system. At present, according to the author, the highest priorities of such a system are effective administration and supervision at all levels, job-related training for health personnel, coordination and optimum use of existing training and health facilities, and more equitable distribution of services. The system itself should be a network of cottage or district hospitals, rural health centres, dispensaries, and mobile clinics and it should offer maternal and child health, disease control, environmental sanitation, medical care, nutrition, and vital statistics services. This setup is being field-tested in Kinkala district in the People's Republic of the Congo to determine its applicability to the country and the continent. Appendices outline the methods being used for implementation and evaluation and report technical discussions upon which the field study is based. (AC)

2188 **Smith, A.J.** *Barefoot doctors and the medical pyramid.* British Medical Journal (London), 2, 25 May 1974, 429-432. Engl.

The Chinese medical pyramid is described as "not just a hierarchy of specialization of treatment but also a hierarchy of medical training." In the rural areas, health services are organized along the lines of the agricultural commune, a self-sufficient grouping of some 5 000 households further subdivided into production brigades and production teams. Each production team, consisting of about 50 families, enjoys the services of two or three barefoot doctors, who administer simple treatment for minor ailments, first aid, health education, etc. At the next level, the commune hospital, inpatient care and medical and surgical treatment for uncomplicationed conditions are available from graduates of the shortened 3-4-year medical course. Medical problems too complex for the commune hospital staff to handle are referred for specialist care to the county hospital, which usually contains between 100 and 300 beds. A noteworthy feature of the Chinese health team is the role played by the mobile teams of city doctors and researchers. Their function is fourfold: to halt any trend (in themselves) toward intellectual elitism; to bring postgraduate education to rural doctors, barefoot doctors, and other medical personnel; to cope with a large amount of the nonurgent, but difficult, medical and surgical problems that may have accumulated over a period of months; and to instruct the barefoot doctors in diagnostic screening tests, the new frontier in barefoot doctor deployment. (HC)

2189 **Stephen, W.J.** Update Publications, Ltd., London. *Cuban health service: with particular reference to primary medical care.* Update (London), 11(6), 17 Sep 1975, 577-578,580,582,584,586,-588. Engl.

With the overthrow of the Batista regime (1959) and the formation of a socialist government, Cuban medicine shifted emphasis from curative care for the few to comprehensive health services for all. The Ministry of Health assumed responsibility for policymaking, provincial departments for supervision, and urban polyclinics and rural hospitals for provision of primary care. These basic units serve populations of 25 000-30 000 and their fundamental priorities include nutrition, housing, hygiene and sanitation, antenatal care and infant mortality, and dentistry. They receive help in health education and follow-up programmes from local groups, such as labour unions, the Committee for the Defence of the Revolution, and the Federation of Cuban Women, in urban and rural areas. An example of the system at work in urban areas is the Polyclinic Julian Grimau, which offers consultative services to seven smaller sectors. It in turn relies on the regional hospital's services to reinforce its maternal child health, outpatient, and emergency services and to screen adults for disease symptoms. Health care in rural areas is exemplified by a hospital in the mountainous Sierra del Escambray region, San Blas. It functions as a polyclinic with facilities for confinement. Its one doctor and supportive staff work mainly on preventive care (inoculation programmes, health education, antenatal supervision) and transfer surgical emergencies to the nearest provincial hospital. Although these two examples are

typical, there are wide variations and some polyclinics, such as one in the Alamar district of Havana, are experimenting with new approaches to health care delivery. (LB)

2190 Strassburger, E. *Problems of health care in a south India state.* International Development Review (Washington, D.C.), 15(4), 1973, 22-26. Engl.

Three hundred seventy-three government primary health centres (PHCs) serve the population of Tamil Nadu, a province of India. Administratively, they are all divided into two sections: general medical and family planning services. Each section is responsible to a corresponding district authority and has its own budget, drugs, facilities, staffing, and reporting procedures. In 1972, the author visited and observed 75 PHCs and interviewed staff, who identified the four major problems as lack of medical equipment, drugs, vehicles, and personnel; inadequate preparation of staff for rural health services; isolation of family planning from other services and emphasis on quantity of acceptors rather than quality of service; and administrative barriers. It is concluded that an administratively unified programme, which offers family planning services within the context of family health and welfare, is a prerequisite to lower population growth and an acceptable level of social and personal welfare. (HC)

2191 Tee, O.H. *Medical services of the **Orang Asli** (Aborigines) of West Malaysia.* Medical Journal of Malaysia (Singapore), 30(1), Sep 1975, 30-37. Engl.

Since 1954, a foreign-supported medical service has effectively underwritten care for the Orang Asli, West Malaysian aborigines. The service comprises 70 jungle medical posts each staffed by an Orang Asli medical orderly or midwife and porter and equipped with two beds, a dispensary, a wireless transmitter-receiver, and a helicopter landing zone; 64 emergency posts staffed by local porters, each consisting of a building with a small range of drugs, a wireless transmitter-receiver, and a helicopter landing zone; and a base hospital at Gombak with 13 wards and a 450-patient capacity. Medical orderlies receive 6 months training in the hospital and 12-18 months in-service training in the wards before being stationed at a medical post; additional in-service courses are given for midwives and hospital orderlies. Hospital staff make regular visits to the medical posts and their surrounding villages and medical orderlies can contact them by wireless between visits. Transportation by boat, ambulance, and helicopter is available for evacuating emergency cases. To date, the programme has successfully eliminated yaws and controlled tuberculosis, leprosy, amoebic dysentery, and malnutrition among the Orang Asli; part of its success is attributed to the deployment of Orang Asli personnel. (HC)

2192 Tellegen, A.O. *Elephant and the tree: community health care in a rural area.* Tropical and Geographical Medicine (Haarlem), 28(1), Mar 1976, S53-S83. Engl.

By means of a dialogue between a foreign district medical officer and a native deputy director of medical services, the author describes the structure of health services in Nyamassa District (Kenya), outlines training for staff, and delivers a strong message to foreign health professionals. The health services he describes are based on a social-cum-preventive-health worker called a local aide who received a short training course in nutrition education, vaccination, family planning, and hygiene. This worker reports to a chief local aide who travels around the district advising colleagues. Health assistants and community nurses are the next level of personnel. They staff and manage health centres, reporting to a district health inspector who is equal in status to the district medical officer, although the latter may advise the district health inspector on medical matters. The district medical officer is head of the district hospital and offers high level curative care, a function for which no one else has been adequately trained. By introducing such a system, the country has limited the health services' dependence on the district medical officer, who is at present usually a foreign doctor, and has increased the people's faith in their ability to help themselves. (AC)

2193 USA, Department of Health, Education, and Welfare. John E. Fogarty International Center for Advanced Study in the Health Sciences, Bethesda, Md. Quinn, J.R., ed(s). *China medicine as we saw it.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(NIH) 75-684, 1974. 430p. Engl. Refs.

See also entries 2154, 2260, 2435, and 2501.

This book comprises reports by a group of specialists in public health and medicine who have visited the People's Republic of China in the past few years. A total of 15 reports are presented: these have been compiled from the authors' recent experience and thus portray impressions that are current. They are grouped under five main topics: Chinese innovations, the organization and status of public health, public health practices, biomedical research, and prevalent diseases. Each report provides a list of references and contains statistical data that have been obtained from mainland China. An index is provided. (AC)

2194 USA, National Institutes of Health. American College of Preventive Medicine, Bethesda, Md. *Health promotion and consumer health education.* New York, Prodist, 1976. 255p. Engl. 74 refs.

A task force on consumer health education and health promotion in the USA presented this report to the Department of Health, Education, and Welfare as background information for a national health plan (1976-1980). The report is in three parts: the first examines lifestyle's relationship with health; the second summarizes current programmes, problems, and practices in

health education; and the third proposes changes and innovations. The task force focused on individual behaviour, culture, and environment as it affects health, illness, disability, and premature death. It called on the government and the private sector to devote substantial resources to health education and justified the demand in terms of economies and improvements in health status. Task force recommendations were based on a model of health education that comprised research and development, a broad regionalized approach, suitable definition and training of personnel, adequate financing, and evaluation. Although the emphasis is on health problems found in developed nations, the concepts of health education are more widely applicable. (AC)

2195 **Valdivia D., A., Menchaca M., J.R., Gonzalez Q., A.R.** *Organizacion hospitalaria en caso de desastre. (Hospital organization under disaster conditions).* Revista Cubana de Administracion de Salud (Havana), 2(2), Apr-Jun 1976, 153-163. Span.

Cuba's state-controlled national health service incorporates a national plan for dealing with natural disasters, particularly hurricanes. Disaster measures to be taken according to this plan include: the establishment and maintenance of meteorological observation stations; the activation of local civil defense organizations; the preservation and maintenance of communications; the evacuation of inhabitants of endangered areas or buildings; the continuous instruction of the public in disaster behaviour; the protection of buildings, industries, ports, etc.; the evacuation of livestock from endangered areas; crop protection and the immediate harvesting of threatened crops; life-saving and damage repair measures; medical attention, food, and lodging for evacuees and other disaster victims; and epidemiological and disease control measures. The outline of a typical hospital plan of action during disaster lists the characteristics of the hospital that must be considered, such as number of beds and access routes, and the general tasks to be performed by each section of the hospital, including those dealing with reception and classification, major and minor injuries, shock, surgery, diagnosis, the blood bank, hospital maintenance, transportation, food and laundry services, and administration. Cuba also maintains medical brigades to be sent to other disaster-stricken nations and the authors discuss the criteria for the selection of brigade personnel and some of the problems that they encounter while on duty in other countries. (RMB)

2196 **Veney, J.E., ed(s).** *Comparative health systems.* Chicago, Inquiry, 12(2), Jun 1975. Suppl. 155p. Engl.
Eighth World Congress of Sociology, Toronto, Canada, 23 Aug 1974.
Individual chapters have been abstracted separately under entries 2158 and 2670.

Twelve sociologically-oriented papers on comparative health systems are presented in this collection. They comprise diverse approaches to cross-national studies, but taken together they indicate the importance of dealing with problems in an interrelated way within each country's sociopolitical, economic, and cultural milieu. They also show the extent of the current search for alternative methods of providing comprehensive health care and the thrust toward mobilizing people to confront and solve their own health problems. The collection is fragmented and thus points out the imperative for more systematic study of promising approaches in cross-national investigations and the importance of establishing one or more centres for this purpose. Responsibilities of such centres would be not only to research different systems but also to serve as learning institutions for health service planners, developers, and students. (AC)

2197 **Vogel, L.C., Sjoerdsma, A.C.** Royal Tropical Institute, Amsterdam. *Purpose and process of filtering primary outpatients.* Nairobi, Medical Research Centre, 1976. 3p. Engl.
East Africa Medical Research Council Conference, Nairobi, Kenya, Feb 1976.
See also entries 2674, 2677, 2678, 2679, 2680, 2682, 2683, 2684, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

A system of separating the critical from the less seriously ill patient has been developed in the outpatient department of Kiambu District Hospital, Kenya. A receptionist classifies the incoming patient as "new," "reattending," or "continuing treatment" and directs him to the "first-line clinical officer (CO)," the "second line CO," or the appropriate treatment unit. The first line CO filters the new patients "in" to the second line CO or "out" to the treatment units according to a defined set of criteria. Experience has shown that the filtering task is best delegated to a senior CO, since working speed seems to vary proportionately with experience. The most experienced COs were found to make the decision (in or out) in less than half a minute. (HC)

2198 **Vogel, L.C.** *Epidemiology and medical geography.* In Vogel, L.C., Muller, A.S., Odingo, R.S., Onyango, Z., and Geus, A.de, eds., Health and Disease in Kenya, Nairobi, East African Literature Bureau, 1974, 3-7. Engl. Refs.
For complete document see entry 2793.

Although scientists in Kenya have used epidemiologic methods since the beginning of the 20th century, they have only recently expanded the applications beyond the study of infectious diseases. In the past decade, they have begun using epidemiologic methods to monitor ecological changes effected by the introduction of sanitation, to investigate health administration, and to link health administration with health planning. They have also gone a step further into mapping and computer analysis of epidemiologic data – medical geography – and have thus correlated environmental factors with epidemiology and ecology. One simple method used in medical geography is to map epidemiologic data and then employ a transparent overlay map showing rainfall, altitude, temperature, humidity, population density, food crops, etc. The information derived

may be passed to health planners, health educators, and health workers practicing in a study area. (AC)

2199 **Wallace, D.** *Medical services in Saudi Arabia.* Nursing Mirror and Midwives Journal (London), 12 Aug 1976, 45-46. Engl.

In Saudi Arabia, where modern and traditional cultures exist side by side, the medical services are still very much in the developmental stage. At present, responsibility for health care is shared among many ministries and thus national health planning has been impossible. Until recently, there were no medical schools in the country; therefore, there were few Saudi physicians. In 1976, the first group of home-trained doctors graduated. Nursing services are in much the same state and British and Egyptian nurses provide most of the care. Shortages in nursing and medical personnel plague newly constructed hospitals of which the King Faisal Hospital is the most elaborate. It incorporates the latest in computerized and medical technology but hasn't enough personnel to staff it adequately. (AC)

2200 **Watts, G.** *Mozambique: medicine with politics: colonial remnants hamper move from cure to prevention.* New Scientist (London), 74(1047), 14 Apr 77, 70-72. Engl.

Mozambique has been saddled with a myriad of technological problems left behind by the Portuguese, but it has fashioned and begun implementing a plan to shift health care emphasis from cure to prevention and to provide services to the rural majority. At present, the newly independent nation must cope with the problems common to other developing nations: an inappropriate medical system, lack of trained personnel, and limited financial resources; it also has unique problems due to the Portuguese colonials' selection of health care equipment, their practice of selling potent pharmaceuticals without prescription, etc. Although the problems evade immediate solution, the Mozambicans have introduced several programmes that suggest solution is possible. They have invested in campaigns to exploit local resources for pharmaceuticals, personnel, and procedures; to immunize children against smallpox, TB, and measles; and to model the medical curriculum on the needs of the population. (AC)

2201 **WHO, Geneva.** *Health care for rural communities.* WHO Chronicle (Geneva), 29(7), Jul 1975, 257-263. Engl.

Also published in French, Russian, and Spanish.

Three doctors from India, Indonesia, and Cuba discuss their experiences in organizing health services for scattered rural populations. They focus on the need to plan services at both the local and national levels; to expand physicians' narrow perceptions of health needs, which have been fostered by current medical education; and to promote health schemes that can be maintained by the people served. Four examples illustrating the fulfillment of one or more of these needs are briefly cited. They include the establishment of a goat cooperative in one Indonesian community; the introduction of a better system of irrigating rice fields in another; the comprehensive health insurance scheme in Jamkhed, India; and the organization of comprehensive health care in Cuba. The speakers agree that WHO support through recognition of such projects would be welcomed but that external financial support would destroy their self-sufficiency. (HC)

2202 **WHO, Geneva.** *Health and rural development.* Geneva, WHO, 1975. 3v.(various pagings). Engl.

Members of the World Health Organization prepared these reports on health and rural development in the Third World as their submission to the Administrative Committee on Coordination investigating UN activities. The reports comprise technical background papers, a main report, and a summary. They define rural development as a process of betterment in the living and working conditions of the poorest rural families, consisting of absolute gains in human welfare: minimal standards of food intake, health, education, skills, shelter, clothing, and security. They call for the WHO and other funding agencies to recognize that rural development may mean substantial initial investment in health and other social services, that it probably means redistribution or colonization of lands for the poor, and that it especially means well-planned, needs-oriented programmes based on local participation, self-generation, and low-cost. Priorities for investment are nutrition, infectious diseases control, fertility control, and environmental sanitation. Appendices contain discussions of WHO's role, organization, programme structure, and participation in interagency planning and coordination; WHO expenditures on technical support benefiting rural populations; and operational features of primary health care. Statistical data are included. (AC)

2203 **WHO, Geneva,** *Rural health services 1974-1980.* Geneva, WHO, 30 Sep 1974. 97p. Engl.

The Ministry of Health, North Western State, Nigeria, invited five international experts to help formulate a plan for redistributing basic health services. The group assessed the present health system, the health status of the population, health development plans, and health resources (money, personnel, and training facilities). They noted that health care facilities concentrated almost entirely on curative medicine; many dispensaries operated without supervision; the demand for maternal-child services far outstripped their availability; infectious diseases were prevalent and immunization rates low; existing health services reached, at most, 35% of the population; and a lack of trained personnel rather than funds was the major obstacle to better coverage. Based on these findings, they drafted a plan for improved rural health services. It provided for the training of maternal child health auxiliaries to work in the dispensaries; the establishment of outreach programmes, e.g., mass vaccination by mobile teams, use of village leaders for malaria drug distribution, etc.; a plan to prepare health centre staff with enough expertise to guide, supervise, and assist the primary health

workers; and the improvement and expansion of existing training facilities. The working documents and background information used by the group are contained in part II of this document. (HC)

2204 **WHO, Geneva.** *Public health training and research.* WHO Chronicle (Geneva), 19(2), Feb 1965, 71-74. Engl.

Also published in French, Russian, and Spanish.

Two WHO-supported projects – one in Yugoslavia and one in Senegal – have successfully elicited support and cooperation from their local populations. The former, a modestly equipped clinic staffed by a full-time midwife and visited regularly by a doctor, serves a rural area inhabited by 2 624 people. Its services, which are based on nutrition, water supply, and socioeconomic conditions, emphasize public health education, sanitation, the control of communicable diseases, and ultimately, a reduction in child mortality. The clinic offers a unique training experience for medical students and an opportunity for research into the provision, administration, and organization of effective health services. This last characteristic is shared by the Senegal project, which is based on a health centre in a mixed rural/urban area of 44 000 people. This centre includes a dispensary, maternity home, inpatient ward, and a staff of seven: an African doctor, midwife, male nurse, and four auxiliaries. It offers training for student midwives, nurses, and sanitarians and undertakes research on the integration of preventive and curative medicine, the creation of viable preventive programmes, the utilization of local personnel, and the epidemiology of certain diseases. (ES)

2205 **WHO, Geneva.** *Health services in Kenya.* WHO Chronicle (Geneva), 15(9), Sep 1961, 323-329. Engl.

Also published in French, Russian, and Spanish.

Kenya's medical system has integrated the few large urban hospitals into a network with local health centres and mobile units. The smaller services are staffed by paramedical workers trained to cope with the country's major health problems and to initiate preventive programmes. Health unit staff members are visited regularly and advised by the district health officers, who are physicians connected to the hospitals. The staff of a typical centre, Limuru, which serves 25 000 people in a 120 km^2 area, consists of a hospital assistant, midwife, dresser, health visitor, health assistants, and drivers. These personnel operate outpatient clinics and a small ward within the centre itself. They also make weekly trips to outlying villages to offer medical care, inspect sanitary facilities, and establish a rapport with the villagers. The system of health centres provides excellent service to the permanent villages but is unsuitable for nomadic tribes, which are served instead by mobile units. These units provide curative care but have been only minimally successful in promoting preventive practices among the nomads. For this reason, some consideration should be given to the training of tribal health scouts. These workers could provide primary medical care and education while living within the tribe. They should be trained in a team setting, which could promote staff cooperation and avoid the problems that have plagued similar programmes. (ES)

2206 **Wray, J.D.** *Child care in the People's Republic of China: 1973.* Pediatrics (Springfield, Ill.), 55(4), Apr 1975, 539-550. Engl. 77 refs.

See also entry 2799.

The author accompanied a delegation of American child health workers on a visit to the People's Republic of China for 3 weeks in 1973. This article is the first of two on his observations of the nursery schools and kindergartens in urban neighbourhoods, factories, and rural communes. He noted the children's good health and attributed it to their diet, their mothers' good health at childbirth, and their access to health care. Other contributing factors are the impressive array of vaccines produced in the country, the extensive immunization coverage rates (95-98%), and the availability of health education. Schoolchildren exhibited few sight defects, which may stem from the eye exercises carried out by students during their daily calisthenics period. One prevalent problem was decay in deciduous teeth – a reflection of the low priority of dental care. (HC)

II.3 Planning

See also: 2105, 2108, 2123, 2155, 2165, 2166, 2167, 2169, 2173, 2176, 2263, 2273, 2317, 2368, 2456, 2464, 2512, 2689

2207 **Bainbridge, J., Sapirie, S.** WHO, Geneva. *Health project management: a manual of procedures for formulating and implementing health projects.* Geneva, WHO Offset Publication No.12, 1974. 280p. Engl.

Also published in French.

This manual presents procedures for managing health projects. It is divided into two sections: the first devoted to planning and the second to implementation. Assuming that a project is a temporary intensive effort to set up or put into operation an ongoing programme, the manual details the steps for formulating a project proposal – identifying objectives and setting target dates – and launching it. Included are flowcharts that correspond to the overall plan as well as individual steps. A list of abbreviations and a glossary are appended. (AC)

2208 **Balfour, M.C.** *Problems in health promotion in the Far East.* Milbank Memorial Fund Quarterly (New York), 28(1), Jan 1950, 84-95. Engl.

Based on his field experience in China and India, the author concludes that the major problem in developing countries today is uncontrolled population growth. Recent public health programmes in the Far East have tended to reduce mortality and infant mortality without compensating for the lack of accompanying socioeconomic growth needed to support the increased

population. Consequently, successful public health programmes may actually be contributing to a lower standard of living. The author recommends that international and private organizations coordinate their aid programmes in the health sector with agriculture, industry, education, etc., so the economics of the recipient nations are kept in balance. Furthermore, it is noted that developing countries must be taught to help themselves and to assume the responsibility for continuing programmes and projects that were begun with help from donor nations. According to the author, any country that refuses to recognize the importance of family planning as the best means for counteracting the economy-shattering population explosion that will inevitably result from improved health standards should be denied foreign aid for isolated health programmes, until their leaders have learned to cope with reality. (RMB)

2209 **Baylet, R., Benyoussef, A.** *Sante et developpement: priorites, planification, et indicateurs sanitaires. (Health and development: priorities, planning, and health indicators).* Social Science and Medicine (Oxford), 9, Feb 1975, 69-73. Fren. 28 refs.

Health planning aims at allocating resources where they will do the most good. In developing countries, this means implementing measures that fall outside the realm of medicine using a multidisciplinary approach to problem-solving. Demographers, economists, statisticians, etc., must work with health planners to improve sanitation, water supply, housing and food production – improvements that yield greater cost-benefit than do preventive medical measures, such as immunization. The use of health indicators in determining priorities and evaluating efforts is discussed and recommended. (HC)

2210 **Ben Gurion University of the Negev, Beersheva. Prywes, M., ed(s).** *Projects in progress demand patterns for health services by the Bedouin population in the Negev.* In Final Report: University Center for Health Sciences, Ben Gurion University of the Negev, Beersheva, Israel, Oct 1975, 13, 15. Engl.

See also entry 2162.

A study is being carried out among the Bedouin to determine the differences between their behaviour patterns and those of the rest of the Negev population; these data are essential for the planning of improved services for this sector of the population. There are some 30 000 Bedouin in the Negev – about 10% of the entire population; their customs and traditions, which influence the style of suitable health services, will be the focus of the study. Since January 1972, records of births and infant mortality in the Negev have been collected in a central medical data bank of the health sciences centre of Ben Gurion University, Israel. Of the 7 000 infants born annually in this area, 5 000 are Jewish, 2 000 Bedouin. Two-thirds of all Bedouin infants are born in hospitals, one-third in encampments. Preliminary analyses show an overall infant mortality of 20.6-24.8/1 000 for Jewish newborns and 35.6/1 000 Bedouin. The figures for Bedouin mortality may be an underestimate because no record exists of Bedouin births and infant deaths that occur outside the hospital. Mortality indices for both Jews and Arabs are higher than those reported in official statistics for the country as a whole. (EE)

2211 **Bodenstein, J.W.** *Development of health services.* South African Medical Journal (Cape Town), 48(60), 11 Dec 1974, 2509-2511. Engl.

In place of the present supply-and-demand, stopgap approach to health services, the author recommends emphasizing preventive medicine, encouraging voluntary participation in health maintenance, concentrating on health rather than disease, decentralizing health services, upgrading training in communications and community health for health personnel, further developing the health team, and planning systematically. (RMB)

2212 **Cahill, K.M., ed(s).** *Health and development.* Maryknoll, N.Y., Orbis Books, 1976. 101p. Engl. Refs.

Individual chapter has been abstracted separately under entry 2164.

This collection of essays on political and economic aspects of international health is the 10th in a series of symposia on tropical health inaugurated by the editor. Topics discussed include health in a world perspective, the political realities of health in a developing nation, the possible contributions of U.S. foreign policy, the impact of independence and nationalism on tropical medicine, ethics of world health, the ecology of disease in the tropics, the relevance of research in tropical medicine today, and economics and health. The role of medicine as a unifying factor in the global community and the intimate relationship between health and all other facets of development are stressed. (RMB)

2213 **Cardus, D., Thrall, R.M.** *Overview: health and the planning of health care systems.* Preventive Medicine (New York), 6, 1977, 134-142. Engl. 45 refs.

Throughout history, planning for health care has been based on disease parameters rather than measurements of health and, consequently, health care systems have emphasized the prevention and cure of disease rather than the promotion of health. The reason is that health is an illusive concept and, like time, has been defined by its relationship with other measurable elements. Because the absence of health (that is, disease and death) can be easily measured, morbidity and mortality figures have been the basis of health care planning to date. Nevertheless, they are not satisfactory means for determining inputs that positively affect health and, recently, research has been devoted to finding more suitable means. Thus far, investigators have identified three systems that interact to influence health – the human psychobiological system, the natural environment, and the social environment. In these systems, any changes or inputs will positively or negatively affect health although the impact from changes is inversely

related to the system's adaptability. At present, this last quantity is an unknown and needs greater research, but enough information already exists for the implementation of controlled studies to test inputs and to measure their impact on health – for instance, their ability to improve a person's capacity to perform certain functions. (AC)

2214 Cheyne, J.I., Lloyd, J.S. Centre for Environmental Studies, London. *Development of rural health services in the Third World: central authority or local autonomy? a fellowship study.* London, Centre for Environmental Studies, Research Paper CES No.13, 1975. 68p. Engl.

This report argues that decentralized health services, planning, and administration are desirable and, to a degree, feasible within the political constraints of developing countries. The first part analyzes the extent to which health manpower and facilities have been extended throughout Kenya, Tanzania, and Turkey during the last decade and suggests that centralized planning has retarded the extension of health care to rural areas. The second part discusses centralized planning and asserts that it is based on an inappropriate philosophy and that its methods – long-term forecasting – are impractical. Finally, the report examines the validity of a commonly held belief that decentralized planning is difficult to control administratively and suggests two ways of overcoming such problems – a method of coordinating area plans and a change in administrative accountability. (Modified author abstract.)

2215 Colombia, Departamento Nacional de Planeacion. *Politica de salud. (Health policies).* Bogota, Color Osprey, 1974. 317p. Span.

This work comprises a detailed analysis of Colombia's health services and a study of the country's present health situation, backed by statistical data on mortality and morbidity. It proposes a development plan and means of implementing it in the light of available economic resources. Also, it evaluates the institutional framework and the policies of the government for health planning in terms of human resources, economic resources, demographic factors, and education in the areas of mental health, disease control, environmental sanitation, basic rural sanitation policies, nutrition, fertility, mortality, and training of personnel in health centres, including dentists and pharmacists. Finally, it describes a linear programming method for the implementation of the development plan. (RMB)

2216 Correa, H. *Population, health, nutrition, and development.* Lexington, Mass., Lexington Books, 1975. 226p. Engl. 192 refs.

This book applies systems analysis techniques to solving world-wide problems in population, health, and nutrition. Chapters 1-6 review the interactions of population growth, health, nutrition, and socioeconomic development; chapters 7-15 present mathematical models for choosing a target population and a contraceptive method, minimizing infant deaths, integrating health and nutrition planning; etc. Some data are included for models that have been tested, but many of the models are theoretical. The book is intended for use by planners and thus does not elaborate on the mathematical reasons for the formulas presented. Author and subject indexes are included. (AC)

2217 Feldstein, P.J. *Research on the demand for health services.* Milbank Memorial Fund Quarterly (New York), 44(3), Jul 1966, 128-165. Engl. 36 refs.

Research is needed to interpret trends in health service utilization and to predict future needs. The first step in research is to define medical care components that, as the author points out, can be difficult to measure. Bearing in mind that the level of care is determined by the interaction of supply and demand, rather than need, he next constructs a model of demand for medical care. This model includes: (1) factors affecting a patient's demand for treatment, such as incidence of illness, cultural-demographic characteristics, and economic restrictions; (2) factors affecting the physician's choice of treatment, such as relative cost to the patient, institutional arrangements, and the physician's own knowledge and costs; and (3) derived demands for the components of care, such as hospital care, physician care, referrals to specialists, nursing home care, etc. The author examines these factors in exhaustive detail and cites the work of numerous other researchers in support of his model design. In conclusion, he stresses the need for more efficient data collection and the development of multivariate analysis methods in order to keep up with the constantly changing demand for health services. (RMB)

2218 Ghoshal, B.C. *Minimum needs health programme.* New Delhi, Directorate General of Health Services, Sep 1974. 12p. Engl. Unpublished document.

The "minimum needs health programme," devised by India's Ministry of Health as part of its Fifth Five Year Plan (1974/75-1979/80) is described and elaborated. The programme represents a departure from past policies in that it substitutes an integrated approach to health services for the traditional, vertical approach and replaces unipurpose workers with multipurpose auxiliaries. The programme aims to deliver basic services including health care, family planning, and nutrition services to rural villagers by providing one health subcentre staffed by one male and one female multipurpose worker per 10 000 population. Phasing schemes for the provision of subcentres and multipurpose workers are set down and plans for the provision of training facilities and teachers are outlined. (HC)

2219 Hellberg, J.H. *Health planning in developing countries.* In May, R.J., ed., Priorities in Melanesian Development, Canberra, Research School of Pacific Studies, Australian National University and Port Moresby, University of Papua and New Guinea, 1973, 138-141. Engl.

Sixth Waigani Seminar, Port Moresby, Papua New Guinea, 30 Apr-5 May 1972.

The main problems in planning health services and medical education for developing countries are the reliance by planners on traditional models from affluent nations and their failure to experiment with local alternatives. Planning should be influenced by the public, health care professionals, and planners, in cooperation with existing health services. All health plans must include services for nutrition and family planning and they must be dynamic enough to meet changing conditions and political philosophies and to satisfy the needs of many different types of people. In developing countries, health planners must deal with obstacles such as lack of adequate statistics, shortage of staff, the impracticality of many proposals, financial difficulties, inadequate machinery or structures for implementation, lack of coordination with planners in other sectors, and political or foreign interference. (RMB)

2220 Idriss, A.A., Lolik, P., Khan, R.A., Benyoussef, A. WHO, Geneva. *Primary health care programme in Sudan.* WHO Chronicle (Geneva), 30(9), Sep 1976, 370-374. Engl. 10 refs.
See also entry 1517 (volume 3). Also published in French, Russian, and Spanish.

The first objective of Sudan's national health programme is to provide primary health care to its rural and nomadic population by 1984. To achieve this objective, a plan for a community-based health service was formulated by a committee of WHO experts, representatives from national government departments, and local leaders. They considered the organization and costs of training and paying sufficient manpower; providing supplies, equipment, and transport; building new facilities; and establishing health information systems. The resulting plan was based on a network of central dispensaries with five dependent health units, each serving 4 000 people. The dispensaries would employ a medical assistant who would supervise the community health workers, evaluate their performance, supply them with drugs, and provide continuing education seminars. The health workers would be chosen by the communities in which they would eventually serve and be trained at the central dispensary. Their 9-months training would emphasize preventive medicine through public health education and mass immunization programmes, promotive health measures such as the construction of sanitary facilities and the encouragement of good nutrition, and basic curative care. The health workers would collect the morbidity and mortality data necessary planning future programmes. With similar training and duties, the nomadic community health workers would be responsible for 1 500 people. This plan relies on the self-help traditions of the people with community control and on coordination of administration and finance. (ES)

2221 Indonesia, Ministry of Health. *Second Five Year Development Plan.* Jakarta, Ministry of Health, Jul 1973. 40p. Engl.
Unpublished document.

This document details the health policies underlying Indonesia's second Five Year Development Plan (1974/75-1979/80) and assesses the present health status of the country, reviewing figures on population, epidemiology, mortality, health facilities, health personnel, health services utilization. It also evaluates achievements under the first 5-year plan and delineates continuing health priorities. Briefly, the plan features basic health services for rural areas and areas where development is already under way, facilities for ambulatory care instead of hospitalization, care for the younger generation and productive age groups and preventive health measures. Specific programmes in family planning, communicable disease control, nutrition, hygiene and sanitation, health education, etc., are outlined. (HC)

2222 International Hospital Federation, London. *Information on planning of health care facilities in developing countries.* World Hospitals (Oxford), 13(1-2), Apr 1977, 94-101. Engl.

Almost 200 citations have been included in this bibliography on health care facilities planning in developing countries. The listing comprises books and other monographs and has been divided into sections on annotated bibliographies and catalogues, WHO publications, general planning, facilities' design, and equipment. The earliest publication date is 1955 and the most recent, 1976; the majority have been published since 1970. A short roster of abstracting and indexing services is presented and names and addresses of important development agencies are included. (AC)

2223 Kenya, Ministry of Health. *Proposal for the improvement of rural health services and the development of rural health training centres in Kenya.* Nairobi, Ministry of Health, 1 Aug 1972. 26p. Engl.

This proposal by the Kenyan Ministry of Health concerns the purpose, functions, organization, and staffing of 6 rural health training centres that were to be opened from 1973-1976 and the provision of trained manpower for the rural health services through 1984. The centres are designed to train the staff necessary for Kenya's projected rural health services system – 224 health centres, 102 subcentres, and 692 dispensaries. The proposed health system will provide antenatal and delivery, immunization, child health, school health, health education, environmental sanitation, and family planning services to the rural population by 1984. The background for the system was a thorough analysis incorporating demography, socioeconomic trends, disease patterns, problem projections, health objectives, constraints, and manpower projections. A systems design including the organization of staff and facilities, strategies, projected manpower requirements, and the training system; the project structure for development, covering objectives and activities; and the financial implications of the proposal are set forth. Copious statistical data are included. (RMB)

2224 **King, M.** *Mass provision of basic health services: the experience of Malawi.* In Gould, G.C., ed., Health and Disease in Africa: the Community Approach. Nairobi. East African Literature Bureau. 1971. 1-8. Engl.
Seventeenth Annual Scientific Conference of the East African Medical Research Council. Nairobi. Kenya. 1970.
For complete proceedings see entry 2753.

In response to the need for basic health services, especially in family planning, the government of Malawi has drawn up plans for a 16-year programme designed to double the number of health centres in the country, train or retrain necessary staff, and improve the quality of outpatient care in hospitals. Planners relied on a classification system for hospitals and health centres that allowed them to set standards for future development and the upgrading and reorganization of existing facilities. The plan has three stages: (1) a 5-year preparation period to allow for construction of a training school for auxiliaries and the graduation of the first class; (2) 11 years of expansion to reach the desired goals; and (3) a maintenance phase, which would include improvements and expansion of staff and facilities to keep up with population growth. Unfortunately, the plan is not likely to be implemented because of lack of money, most of which must come from foreign aid. Statistical data are included. (RMB).

2225 **Klaus, D.J.** American Institutes for Research. Washington, D.C. *Evaluation plan for the DEIDS and related projects. Final report to the United States Agency for International Development.* Washington, D.C., American Institutes for Research. Jul 1974. 82p. Engl.

The Development and Evaluation of Integrated Delivery Systems (DEIDS) programme has been initiated to explore new methods for providing low-cost, far-reaching health services in the developing countries. The programme's aim is to improve overall health and well-being, particularly for those with very low incomes, by furnishing needed medical, nutritional, and family planning services where these are not now available. The basic approach of the DEIDS projects and similar integrated health delivery programmes is the expansion of indigenous health services through the use of innovative techniques intended to increase their outreach, effectiveness, and impact. This report describes the development of the model, illustrates its application using the Equador DEIDS project as an example, discusses the features and utilization of the model in planning future health service delivery programmes, and presents recommendations as to further steps that should be taken in support of the DEIDS effort. (Journal abstract.)

2226 **Kleczkowski, B.M.** *Health care facilities in developing countries.* WHO Chronicle (Geneva). 30(9). Sep 1976. 363-369. Engl.
Also published in French, Russian, and Spanish.

Buildings and equipment are necessary for the provision of health services and their maintenance and construction should be an essential part of health planning. They represent major capital and ongoing expenditures and must be adapted to climate, energy resources, available staff, the functions of the health services they house, and the habits and wishes of the population served. Their costs are directly related to their size and quality and these elements should be manipulated to fit resources. When resources are limited, as is the case in developing countries, consideration should be given to modifying existing structures and models for countrywide application should be developed at the national level with assistance from WHO. Other measures for WHO assistance include increasing peripheral health units: creating mobile teams: training traditional practitioners: designing service packages and manuals; training personnel in maintenance, management, and education; promoting community participation: planning individual medical care facilities: programming long-term activities to adapt, modernize, and coordinate existing facilities: and coordinating plans for construction of new institutions. (AC)

2227 **League of Red Cross Societies, Geneva.** *Health care moves into the community.* Panorama (Geneva). 3. 1975. 4.7. Engl.

In 1973, the Nursing Advisory Committee of the League of Red Cross Societies urged the present organization to utilize its particular potential for promoting community involvement in the provision of primary health care. The League has a unique position because of its framework for community development, extensive and well-distributed membership, and its ties with governments, UN agencies, industry, and commerce. The nursing committee also recommended that the knowledge, experience, and skills of the nurse be used at all levels of policymaking and programme planning, that doctors and nurses be given a community-based education, and that primary health workers receive training and recognition. (HC)

2228 **Mabry, E.G.** Christian Medical Association of India. Nagpur. *Planning a community health programme.* Nagpur. Christian Medical Association of India. 1972. 64p. Engl. 65 ref's.

The information in this booklet is intended for superintendents and management committees of church-related hospitals in India, but the step-by-step guidelines could easily be adapted elsewhere and the glossary, sample survey forms, bibliography, and suggested readings make the pamphlet a useful reference for any one developing comprehensive health services. The first of two main sections deals with planning and emphasizes the importance of assessing community characteristics, health problems, goals, priorities, constraints, etc. The second discusses evaluation of appropriateness, adequacy, effectiveness, efficiency, and side effects of both old and new programmes. A sample outline of a programme directed toward decreasing infant and

toddler mortality and morbidity is appended and information on formulating a questionnaire and conducting, knowledge, attitude, and practice (KAP) surveys of general health and family planning is also included. Throughout the booklet, involvement of the community and response to its felt needs is urged, as well as cooperation and coordination with other agencies. (JT)

2229 Medina Luis, E. *Salud: necesidad social del mundo actual. (Public health: a social need).* Revista Medica de Chile (Santiago), 103(7), Jul 1975, 451-463. Span. 26 refs.

A Chilean physician urges a return to the country's earlier system of health care delivery (60% state-administered, 40% private), which functioned quite acceptably until Allende unbalanced it in 1970 by grossly inflating public health spending. In reaction, the present government favours a free enterprise approach to health care, an attitude the author deplores because it fails to consider the needs and actualities of the Chilean health care situation. He points out that several factors must be taken into account when choosing a health care system. The first is human resources. Chile has only half the doctors it needs and many of these are specialists practicing in urban areas. Hospital resources are also important to a population that is increasing more rapidly than the number of available hospital beds, although an elaborate referral system and improved outpatient services are helping to alleviate this shortage. Another factor is financial support: only 30% of Chile's population can afford to pay for medical care, yet the country cannot allocate more than 6% of its gross national product to health care without disrupting the economy as Allende did. The public demand for medical services must also be considered and at present only 29% of those seeking care are being treated. Other health needs, such as immunization, sanitation, etc., must be carried out without voluntary public participation. As the best interim solution to all these problems, the author strongly recommends the reestablishment of the previous "mixed" system, giving priority to emergency medical services, maternal and child health, the hospital system, preventive medicine, and specialized services that would only be available in one location. (RMB)

2230 Ordonez Carceller, C., Escalona Reguera, M. *Salud en los asentamientos humanos en Cuba. (Health in the Cuban habitat).* Revista Cubana de Administracion de Salud (Havana), 1(3-4), Jul-Dec 1975, 90-101. Span.

Cuba's national health service is based on the principles that the state is responsible for the health of its people, free medical care should be available to everyone, curative and preventive medicine should be combined, health planning should be integrated into economic and social development planning, and the people should exercise direct control over the health services. After following these principles for 15 years, Cuba now possesses more than 9 000 physicians and 46 500 health auxiliaries and technicians of various types, 366 clinics, 255 hospitals (with a ratio of 4.6 beds/1 000 inhabitants), 35 laboratories, and 18 blood banks. Additional health policies are being formulated to improve the quality of human life and living conditions, including such measures as the conservation of natural resources, the protection of the environment, the evaluation of the ecological balance, the improvement of housing and community design, and the development of community medicine. The authors discuss the characteristics of community medicine, noting that it should have sufficient personnel and facilities to integrate all health, social, and ecological disciplines; serve both healthy and ill inhabitants of the community; have referral contacts with local and regional hospitals; keep track of each patient throughout the entire course of his treatment; group and treat patients with the same disease; offer the services of a health team; and encourage social participation. Teaching clinics have been established to train medical students in community medicine and their curriculum and faculty qualifications are presented. (RMB)

2231 Pan American Health Organization, Santiago. *Guia para el analisis de procesos de planificacion en el sector salud. (Guide for the analysis of health planning processes).* Santiago, Pan American Health Organization, Mar 1972. 1v.(various pagings). Span.

The Pan American Health Organization has designed guidelines to help health planners in the formulation and implementation of health plans. An outline has been provided of the steps to be taken in the planning process and of the rationale for criteria in problem-solving. An accompanying set of tables serves as a checklist for implementation; it includes all the concepts implicit in a health development plan, aiding the planner in identifying missing or redundant concepts. (RMB)

2232 Pan American Health Organization, Santiago. *Preparacion de planificadores de la salud en America Latina: un enfoque actual. (Training of health planners in Latin America: a present-day approach).* Santiago, Pan American Health Organization, 1971. 19p. Span.
Advanced Seminar on Policies and Strategies of Health Planning, Santiago, Chile, Nov 1971.

Chapter I of this seminar working paper discusses antecedents to present Latin American training courses for health planners, particularly the PAHO/National Center for Social and Economic Development (Venezuela) method of local planning that was used until 1970. Since this method was not broad enough to deal with health problems and administrative and political complications, a 1970 PAHO conference recommended that "basic" health planning courses be implemented on a national level, with specialized regional courses for high officials; that training be designed to develop the planners' capacities to solve real problems rather than manipulate methodology; that complementary social, political, etc., methods be incorporated; and that the content of national courses reflect the needs and resources of individual countries. In accordance with

these recommendations, the Pan American Program for Health Planning designed a basic health planning training course that emphasizes the identification of the critical areas of each health problem and the implementation of problem-solving techniques. Chapter II explains the rationale for this course. Chapter III describes the course content, which includes units on health and its frame of reference, problems and methods of health planning, means and strategies for health planning promotion, and case studies. An outline of this curriculum is contained in the appendix. (RMB)

2233 Pan American Health Organization, Washington, D.C. *Health planning in Latin America.* Washington, D.C., Pan American Health Organization, Scientific Publication No.272, 1973, 63p, Engl.

A history of health planning and its economic basis in Latin America is traced from the 1920s to 1970 when the Pan American Health Planning Center was established. Before World War II, the only practical application of public health was the charity hospital; however, during and after World War II, the need for raw materials for export forced the introduction of environmental health services into the production sector. To implement these services, public health specialists, trained in the United States and unprepared for the problems of developing countries, undertook service in Latin America. Thus, progress was limited until the signing of the Charter of Punta del Este in 1961. This signalled the recognition that social planning is an integral part of development planning. Then came a document entitled "Health planning: problems of concept and methods," upon which each Latin American country based a national health plan. Most of the plans, however, foundered, because of the planners' lack of scientific knowledge of the subject being planned or weaknesses in the planning method. To overcome these obstacles, the establishment of a multinational clinic for promoting the health planning process in Latin America was recommended – the Pan American Health Planning Center, Santiago. The centre's activities are to continue and expand training programmes on problems related to the application of planning methods in each country, to strengthen advisory services currently offered to the various governments by PAHO-WHO and the Latin American Institute for Social and Economic Planning (ILPES), and to collect and disseminate information on health planning. These activities are described in detail in this paper and curricula for the training courses in health planning and administration are presented. (HC)

2234 Papua New Guinea, Department of Public Health. *Report on the Administrative College Workshop on Health Planning.* Port Moresby, Department of Public Health, Health Planning Circular No.5, 25-29 Jun 1973, 20p, Engl.

Administrative College Workshop on Health Planning, Port Moresby, Papua New Guinea, 25-29 Jun 1973.

Unpublished document.

To formulate a national health plan for Papua New Guinea, 23 government officials, senior medical personnel, representatives of church organizations, and social work directors met in a workshop from June 25-29, 1973. They based their discussions on the government's national improvement programme, which, as interpreted by the Minister for Health, stressed the equal distribution and decentralized administration of the country's health resources. The workshop members adopted these principles and added to them the results of questionnaires given to a cross-section of the population and an analysis of the country's health problems. The objectives derived from these sources included the provision of preventive, as well as curative, care to everyone in the country, regardless of location or means; the expansion of the rural health post system and the use of district hospitals as training and supervisory centres for paramedical personnel and as sources for specialized care and research; the integration of health services with other services (environmental control, social development, voluntary organizations) with decentralized, local administrations; the adoption of mass campaigns aimed at the eradication of preventable, infectious diseases; and the institution of health education programmes. These objectives were based on the necessity to keep all developments within the financial resources of the country but with the recognition that international aid could be accepted in the beginning. Some constraints to this plan are financial cutbacks, political interference, and the lack of both medical and managerial manpower. To deal with these problems, the workshop set up organizing committees to study existing programmes and problems and to suggest future improvements. (ES)

2235 Radford, A.J. *Future of rural health services in Melanesia, with particular reference to Papua New Guinea.* In Ward, M.W., ed., Change and Development in Rural Melanesia, Canberra, **Australian National University and Port Moresby, Papua New Guinea, University of Papua and New Guinea, 1972, 250-279, Engl. Refs.**

Fifth Waigani Seminar, Port Moresby, Papua New Guinea, 14-20 May 1971.

Papua New Guinea shares with the rest of the developing world the problems of fluctuating resources, a disorganized health care delivery system, epidemics, and a lack of community participation. The author recommends that a national health plan be established giving priority to: bonding medical students, who would then be legally obligated to give a year of national service for each year of education; obtaining accurate demographic statistics; training and deploying aid post orderlies, the backbone of the rural health service; training both doctors and nurses in community health and providing financial incentives for those who enter that field rather than some other specialty; recruiting male nursing students; immediately ceasing construction of expensive, Western-style hospitals, X-ray units, etc., that serve only a tiny percentage of the population; charging a uniform, token fee for all medical services, so that health personnel would be supported by their

patients instead of the government: entrusting missionary health facilities. which are generally more sophisticated and better equipped. with epidemiological studies: and implementing family planning programmes. Statistical data are included. (RMB)

2236 **Rao. S.K.** WHO. Geneva. *Suggested outline of planning. staffing. operating. and utilization of rural health care delivery systems in the Republic of Vietnam.* Geneva. WHO. 1974. 34p. Engl.
Unpublished document.
A coordinated and sustained system of basic health services is proposed for the Republic of Vietnam: its incorporation of existing health programmes. such as maternal and child welfare. communicable disease control. health education. family planning. etc.. is discussed and the roles of the existing categories of health manpower are detailed. It is estimated such a system will reduce infant and child mortality from 130 per 1 000 live births to 60 per 1 000 and eventually effect a lower birthrate. (HC)

2237 **Schaefer. M.** WHO. Geneva. *Management methods for planning and implementing health projects.* WHO Chronicle (Geneva). 29(1). Jan 1975. 18-23. Engl.
Also published in French. Russian. and Spanish.
The project management method of health project planning is a systematic series of steps whereby executives and managers can define desirable changes in public health or in the health services. set time limits. plan strategies. and mobilize resources. The method has been tested and refined by the WHO systems analysis team who applied it to health projects in eight different countries over a 5-year period. The five phases of the method are outlined: they comprise preparation for formulation. decisions on the project proposal. detailed planning of implementation. and controlled accomplishment of implementation. These steps are elaborated further in an operational manual that will be available soon. It should be useful for courses on planning. national health planning. health programming. management of existing projects. and planning and implementing campaigns with short-term objectives. (HC)

2238 **Shear. D.. Clark. B.** *International long-term planning for the Sahel.* International Development Review (Washington. D.C.). 18(4). 1976. 15-20. Engl.
The devastation suffered in the Sahel during the drought from 1968-1974 prompted Africans to design a development strategy aimed at self-sufficiency and economic growth. The strategy. which calls for massive investments by international and national agencies. incorporates human resources and health: transportation and infrastructure: price policy. marketing. and storage: technology transfer: ecology and forestry: livestock production: dryland agriculture: irrigated agriculture: and fisheries. Its first steps are to define operationally food self-sufficiency and self-sustaining growth. to formulate methods for forecasting projects' thrust toward self-sufficiency. and to outline evaluation criteria and management feedback for projects. The unique element of the plan. which represents efforts of more than 30 African states and international bodies. is that the different development sectors must cooperate if they are to ensure that their projects promote self-sufficiency. (AC)

2239 **Smith. K.A.** *Health priorities in the poorer countries.* Social Science and Medicine (Oxford). 9. Feb 1975. 121-132. Engl. 21 refs.
In general. countries define their health priorities in terms of needs. felt needs. and demands of health services' users. policymakers and funders. and medical personnel. To discover what criteria developing countries use to determine their priorities. the author sent questionnaires to the ministries of health of 23 Caribbean, 5 Asian, and 15 African nations. Nineteen respondents indicated that their main areas of concern were the improvement of training. rural services. hospital services. and environmental sanitation: the elimination of infectious diseases: and the shifting from hospital-based to community and prevention health services. Most of the countries surveyed acknowledged the importance of incorporating health planning into national plans for socioeconomic development. For comparative purposes. the author examines WHO reports. basically in agreement with his own findings. on the same countries and contrasts the health priorities revealed in the survey with those of the USA. USSR. and Latin America as a whole. Finally. the implications of the survey results with regard to training are discussed. Appendix A contains a list of those countries that received the questionnaire. although not all responded: Appendix B records the contents of the questionnaire and an analysis of the answers from each region. (RMB)

2240 **Tekse. K.** WHO. Brazzaville. *Some estimates of vital rates for Sierra Leone.* In WHO AFRO Technical Papers No.9. Brazzaville. 1975. 7-43. Engl.
See also entry 2784.
Some attempt to estimate vital rates for health planning in Sierra Leone has been made using figures from incomplete studies undertaken from 1851 to 1970. Data were primarily derived from the 1963 census. registration of vital events (various records ranging from 1926-1963). and a few demographic surveys. The method used for estimations was stable population analysis. which is based on the assumption that the rate of population growth has been stable over the period: this means that fertility. mortality. and migration are assumed to be stable. Fertility studies in Sierra Leone indicate a possible birthrate of 50 per 1 000 throughout its history, but there is some evidence that mortality has decreased. Analysis of methods and data is set forth and statistical data are appended. (AC)

2241 **WHO. Brazzaville.** *Long-term health planning for the African region: 1975-2000.* Brazzaville. WHO. 8 Oct 1974. 27p. Engl.

In the early 1970s, member states in the WHO African Region began preparing long-term plans for health services and manpower. They identified general and intermediate objectives for health manpower resources, environmental health, epidemiological surveillance and disease control, and strengthening of health services. Targets included provision of public water supplies to 90% of rural and 100% of urban populations by year 2000; deployment of 1 doctor for every 5 000-10 000 population, 1 technician for every 500 inhabitants, 1 nurse for every 300, etc.; and establishment of 10 university centres for health sciences. A full list of objectives and recommended activities is set forth. (AC)

2242 **WHO, Brazzaville.** *Handbook for the health planner in the African region.* Brazzaville, WHO, 5 May 1971. 1v.(various pagings). Engl.

In this handbook, the steps involved in preparing, implementing, and evaluating a national health plan are listed and are specifically adapted for use by public health administrators in the WHO African Region; three annexes are also provided and they form the book's bulk. They include methods of classifying demographic data; formulas for determining health planning indicators, such as infant mortality; relevant economic data and where it can be obtained; a classification of hospitals; indices of measurement used in hospital statistics; a number of suggested tables for collecting, updating, processing, storing, and utilizing health planning data; and a list of recommended readings. (HC)

2243 **WHO, Geneva.** *Food and nutrition strategies in national development.* Geneva, WHO Technical Report Series No.584, 1976. 64p. Engl. 15 refs.

Also published in French, Russian, and Spanish.

A joint FAO/WHO committee on nutrition met in 1974 to discuss strategies for incorporating nutrition programmes and policies into national development plans. Their aim was to encourage policies that ensure not only sufficient supply but also equitable distribution of food. Previous nutrition programmes had been based on increasing food production and had only succeeded in bettering the lot of large food producers. The committee sought to avoid earlier pitfalls by espousing nutritional policies that embraced three essential ingredients: increased productivity and redistribution of wealth at local levels, specific geographic and political variations to fit national differences, and planned agricultural upgrading. By defining national development as removal of deprivation rather than increased GNP, the committee submitted that the objective of national development is to create conditions enabling every individual to consume a diet adequate for normal physical and mental development. Specific tactics in the field of agriculture included research in low-cost technical innovations, farmer training programmes, marketing improvement, irrigation, etc. Other tactics incorporated food fortification, supplementary feeding programmes; infectious disease control; maternal and child health programmes; and nutrition education. A possible organizational structure for food and nutrition planning is set forth and a chart for classifying the undernourished population is appended. Also appended is a brief discussion of evaluation and surveillance measures in nutrition programmes. (AC)

2244 **WHO, Geneva.** *Planning and evaluation of public dental health services: report of a WHO expert committee.* Geneva, WHO Technical Report Series No.589, 1976. 35p. Engl.

Also published in French, Russian, and Spanish.

A WHO expert committee considered ways in which planning oral health could be integrated into overall health planning and programming, examined evaluation procedures, and discussed further testing and research in dental health. Although committee members recognized the diversity of planning and political structures throughout the world, they also perceived similarities, noting that there were certain universal principles and steps in planning. They emphasized that careful and continuous national health planning was essential; that all health planning, of which dental planning is a part, should take place within the context of national, social, political, economic, and health policies; that oral health programmes should be consistent with general development; that oral health planners should use non-health and nondental resources imaginatively to achieve oral health objectives; that administrators should continuously assess programme appropriateness, adequacy, effectiveness, and efficiency, etc. Committee recommendations were that WHO make available educational materials for training qualified programme planners and administrators, that research be devoted to improving methods of planning and evaluation, that WHO extend its global epidemiology programme and encourage better systems for gathering standard oral health data, that country health administrators go beyond their boundaries and seek assistance, and that methods for improving oral health be studied further. (AC)

2245 **WHO, Geneva.** *Organization of mental health services in developing countries: 16th report of the WHO Expert Committee on Mental Health.* Geneva, WHO Technical Report Series No.564, 1975. 41p. Engl. 20 refs.

Also published in French, Russian, and Spanish.

A WHO expert committee reviewed the extent, nature, and consequences of mental health problems in developing countries and, based on their findings, recommended that all governments incorporate mental health services into basic health services by decentralizing care and collaborating with community agencies. The committee acknowledged the scarcity of resources to meet all health care problems but emphasized that in developing countries more than 40 million people suffer from serious mental disorders and that at least 10% of every population experiences serious disability due to mental disorders. Committee members established mental health priorities as the recognition, immediate management, and appropriate treatment of psychiatric emergencies; care in the community of patients with

chronic functional psychoses, mental retardation, epilepsy, and brain damage; recognition and appropriate management of mental health problems of patients attending health centres; and the definition and care of high-risk groups within each country. Recommendations were that governments formulate national policies on mental health, that mental health departments be established within national or regional health administrations, and that governments invest realistically in personnel development, adequate provision of drugs, a network of mental health facilities, and data collection and research. (AC)

2246 **WHO, Geneva.** *New approaches in health statistics.* Geneva, WHO Technical Report Series No.559, 1974, 40p. Engl.
Second International Conference of National Committees on Vital and Health Statistics, Copenhagen, Denmark, 1-5 Oct 1973.
Also published in French, Russian, and Spanish.

National committees on vital and health statistics from more than 50 countries met in Copenhagen to discuss new methods of data collection. Conference representatives reviewed the state of health statistics at present and the need for them in the future. They recommended that national committees or equivalent bodies exert pressure within their countries for greater coverage of vital registration, census enumeration, health statistics, etc.; endeavour to improve communication and understanding between producers and users of statistical information; identify areas for which statistics are needed and recommend specific ways to meet these needs; and focus efforts on improving health statistics. (HC)

II.4 Geographic Distribution of Health Services

See also: 2134, 2223, 2234, 2411, 2692

2247 **Cadieux, H.** *Rural health in the developing world: an overview.* Ottawa, University of Ottawa, 1977, 24p. Engl. 21 refs.
Unpublished document.

Although most developing countries recognize that prevention is better than cure, they have yet to implement even the most rudimentary public health measures and their peoples are suffering and dying of diseases for which simple, effective, and relatively inexpensive means of control have long existed. There are two reasons: one is the conceptual error that health is related to the presence of doctors and hospitals and the other is the existence of a self-serving elite. For these reasons, medical training, doctor's salaries, and hospitals usurp most of the national budgets and comprehensive services are available to only small numbers of people. Tanzania's experience serves as an example and demonstrates how urban-centred health facilities, once established, eat up larger and larger portions of the health budget and preclude any advancements in health status for the majority. Thus far, only the People's Republic of China has successfully uprooted its powerful elite and invested in labour-intensive technology – actions that have netted outstanding results. (HC)

2248 **Chinese Communist Party Committee of the Peking Tuberculosis Research Institute, Peking.** *Implementing Chairman Mao's directive "In medical and health work, put the stress on the rural areas."* Chinese Medical Journal (Peking), 1(4), Jul 1975, 237-240, Engl.

Guided by Chairman Mao's directive "In medical and health work, put the stress on the rural areas," the Peking Tuberculosis Research Institute has sent 17 medical teams into the suburbs and rural areas around Peking. The scheme, which was surrounded by controversy in the beginning, has not adversely affected the research and clinical work of the mother institution and has proved beneficial to both the institute's staff and the population served. Thus far, more than 30 senior medical personnel have served on mobile teams for 6 months to 1 year and have adapted successfully to general practice. The importance of continuing this programme has been stressed. (HC)

2249 **Ecuador, Ministerio de Salud Publica.** *Estudio de la provincia de Manabi. (Study of the province of Manabi).* **Quito, Ministerio de Salud Publica, Departamento Nacional de Poblacion,** Unidad de Evaluacion, Mar 1974, 32p. Span.
Unpublished document.

In this 1974 study of the province of Manabi (Equador), the section on health presents the available health facilities and the health status of the population and reveals that the province's health care providers comprise the Ministry of Health, the Social Security Institute, the Red Cross, and health units of the armed forces. Facilities include 4 general hospitals, 1 private clinic, 13 health centres, 14 subcentres, 32 health posts, and 14 dispensaries for a population of 920 727. Health services personnel constitute 318 doctors, 72 interns, 8 midwives, 64 nurses, 1 744 nursing auxiliaries, 64 health educators, 60 dentists, 296 health inspectors, 152 pharmacy auxiliaries, 40 radiology auxiliaries, 40 laboratory auxiliaries, and 64 auxiliary statisticians. Included are copious statistics covering demographic and socioeconomic aspects of the population, mortality, infant mortality, fertility, the distribution of health care personnel and facilities, etc. (RMB)

2250 **Haraldson, S.R.** Scandinavian School of Public Health, Gothenburg, Sweden. *Health planning in sparsely populated areas: with special attention to mobile populations of developing countries.* Gothenburg, Sweden, Scandinavian School of Public Health, Department of Social Medicine, 1973, 39p. Engl. 38 refs.

Compiled from previously published WHO reports, conference articles, and textbook chapters, this pamphlet brings together conclusions and recommendations based on the author's extensive interdisciplinary research into health planning for scattered and nomadic groups in Africa, Asia, Australia, and North America. According to the author, migrant people have unique health problems due to their transience and low population density. Their mobility reduces their access to health services and promotes underutilization of available resources – a factor that discourages national health planners from investing in migrant services. Instead, planners usually propose sedentarization programmes that encourage voluntary or sometimes forceful settlement of nomads in small villages. The author believes the reasons usually given for such resettlement – the dangers of malnutrition, infection, and poor sanitation – are largely unjustified. As an alternative, more in keeping with human rights, he supports "guided nomadism," which accepts mobility as a lifestyle upon which health planning can be based. Specific recommendations for health planning include setting up seasonal checkpoints based on migration patterns; establishing a regional, rather than a national, board of nomad affairs; utilizing auxiliary personnel in migrant services; and developing communication and transportation networks. (LB)

2251 **Heller, T.** Christian Medical Commission, World Council of Churches, Geneva. *Objectifs médicaux ici et ailleurs: schémas régissant les pratiques médicales en Angleterre et dans le Tiers Monde. (Patterns of medical practice in England and the Third World).* Contact (Geneva), 33, Jun 1976, 1-9; 25, Sep 1976, 1-9. Engl., Fren. 31 refs.

Certain problems are inherent in the Western system of health care delivery; these include the concentration of services in urban centres, the migration of professionals to lucrative specialties and locations, and the emphasis on curative care. These problems affect the health and well-being of peoples everywhere, but advancements in the developed countries, such as universal education and sanitation, mask their impact and permit developed country peoples to believe that their problems are much different from those of developing country populations. Thus is created the "aid mentality" in which developed country personnel somehow feel superior and in a position to help the Third World. They point out the problems of transplanting the Western system of health care and proffer solutions while they allow their own countries to perpetuate the same problems. For example, in Britain, 66% of the total health budget is spent on hospital services, while only a small fraction is devoted to preventive medicine. The most underserved areas of Britain are rural and health workers are concentrated in the cities. Such examples are manifold and they indicate that both developed and developing countries suffer from the inappropriateness of Western medicine and that they should work together to solve their mutual problems. (AC)

2252 **Howe, B., Warren, P.S.** *Institution-centered approach to rural primary health care: a preliminary report from New York State.* American Journal of Public Health (New York), 67(1), Jan 1977, 54-55. Engl. 20 refs.

In areas where physicians are unlikely to settle permanently, it may be possible to maintain continuity of care by means of a stable community health network or institution. This institution would comprise five elements: a programme for mobilizing community and outside resources; structured affiliations with secondary and tertiary facilities, training programmes, social services, etc.; an effective patient record system; locally recruited clerical and auxiliary staff; and an ongoing recruitment programme for physicians and paramedical personnel. In 1971, a model family group practice based on this approach was initiated in a town of 6 000 with a catchment population of 45 000 in upstate New York, USA. Although it is too early to judge whether or not the institution-centred approach is universally applicable, its initial success suggests it is worthy of health planners' consideration. (HC)

2253 **Onyango, Z.** *Health facilities and services in Kenya.* In Vogel, L.C., Muller, A.S., Odingo, R.S., Onyango, Z., and Geus, A.de, eds., Health and Disease in Kenya, Nairobi, East African Literature Bureau, 1974, 107-125. Engl. 10 refs.
For complete document see entry 2793.

An overview of the resources and restraints of the health system in Kenya indicates that numbers of health personnel doubled from 1960 to 1971 and, during the same period, hospital beds increased by 47%. Most health services were made available through the Ministry of Health, whose functions are to oversee national health policy, national health development plans, organization and administration of central health services, health personnel training, health legislation and regulation, health standards maintenance, liaison with health-related agencies, and monitoring of international health regulations. Since the 1960s, the Ministry has pursued the objectives of extending health services to all the population as rapidly as possible, intensifying staff training, cooperating with Tanzania and Uganda in medical research, and investing in environmental health and disease control programmes. The Ministry is supported in its work by local governments, voluntary societies, and church-related groups. In return, government provides some funding and resource personnel. In addition, advisory committees comprising church and government representatives coordinate the services. Statistical data are tabulated. (AC)

2254 **Pridan, D.** Israel, Ministry of Health, *Health services of Judaea and Samaria.* Judea and Samaria, Military Headquarters, Department of Health, 1974, 49p. Engl.
See also entries 2181, 22455, and 2256.

In the largely rural and agricultural area of Judea and Samaria the crude birthrate of 45 per 1 000 population is among the highest in the world; however, a drop is expected after 1975 due to the higher educational level

of women reaching fertility age. the drop in infant mortality. and the rising standard of living. In the last decade. infant mortality decreased from about 80-90 per 1 000 live births to 40-50 per 1 000. This decline is attributed to the eradication of malaria. the increase (to 25%) of infant deliveries that take place in hospitals. the sharp drop in deaths from poliomyelitis and measles. and the sharp increase in immunization coverage of infants. Most of these services have been provided by the Government of Israel: nongovernmental services are confined to the Red Crescent societies. church-sponsored hospitals. and the United Nations Relief and Work Agency for Palestine Refugees in the Near East. In 1974. a public health division was created to standardize. coordinate. and plan activities. programmes. and manpower for the whole area. Laboratories and blood banks as well as schools and training facilities for professionals were grouped under a special unit. Each hospital now runs specialists' outpatient clinics. Through the services. about 80-100 patients from Arab countries were hospitalized in Israel. The public health division has coordinated a network of clinics for ambulatory primary care: some have been combined with the maternal child health centres that are regularly visited by midwives. (EE)

2255 **Pridan. D.** Israel. Ministry of Health. *Health services. Judaea and Samaria. Gaza and Sinai.* Judea and Samaria. Military Headquarters. Department of Health. 1973. 46p. Engl.
See also entries 2181. 2254. and 2256.

The population of Judea and Samaria is pressing for more and more sophisticated services. but the lack of qualified health personnel has impeded the Government of Israel's ability to meet the demand. Steps have been taken to increase available personnel: in 1970 a school for qualified midwives (2 years training) was opened in Nablus and in 1971 a school for practical nurses (18 months training) was opened in Tulkarem. one for qualified nurses (3 years training) was opened in Ramallah. and two for male practical nurses were opened in Nablus and Hebron. In 1973. 14 assistant pharmacists graduated from a special course and 30 laboratory technicians completed a 2-year training course. New services were opened. including a well-equipped orthopaedic hospital in Jericho with more than 30 beds. an X-ray institute in Nablus. and 14 new clinics with mother and child health care services. 2 rural clinics. and 30 afternoon clinics for labourers. A low-cost insurance scheme. tables showing figures for increased services and paramedical personnel. distribution of health workers. infectious diseases. and maps are set forth. A brief account is also given of the health services on the Golan Heights serving a total population around 10 800. (EE)

2256 **Sever, Y.** Israel. Ministry of Health. *Statistical report. health services Judea and Samaria 1975.* Judea and Samaria. Military Headquarters. Department of Health. 1975. 38p. Engl.. Hebrew.
See also entries 2254 and 2255.

Expansion of health services and remodeling of health clinics were undertaken in Judea and Samaria during 1975. A standardized pharmacopeia was instituted as well as a store for medical and general supplies: a central water and food inspection laboratory was installed. The total area of vegetable gardens irrigated with sewage was decreased by 50%. Leishmaniasis. malaria. and poliomyelitis prevention and treatment were stepped up and immunization against tuberculosis instituted. In the first 10 months operation of a Salfit health centre. 195 healthy infants were delivered. Thirty-three new doctors. 66 nurses. and 12 paramedical personnel joined the government health services and 15 registered nurses. 18 male practical nurses. and 26 practical nurses graduated from government schools and were employed by the health services. Special training programmes were carried out for doctors. nurses. X-ray technicians and laboratory personnel. (EE)

II.5 Financial Aspects

See also: 2120. 2132. 2171. 2212. 2229. 2234. 2273. 2332. 2342. 2394

2257 **Aggarwala, O.P.** *Transport facilities. problems. costs and their effect on efficiency in the community health services at primary health centres.* Indian Journal of Preventive and Social Medicine (Varanasi. India). 3. Sep 1972. 207-209. Engl.

Reliable transportation is essential for primary health centre activities in India and one four-wheel vehicle is not sufficient to undertake visits to district headquarters. ambulance services. special programmes (family planning. disease eradication. etc.). subcentre visiting. field supervision. and home visiting. As a result. at present. the last three services are neglected. The need for additional transport is apparent. but the costs of buying and maintaining a four-wheel vehicle militate against a centre's having more than one. A possible solution is to provide all paramedical staff with a fixed bicycle allowance and all medical officers with a motorcycle allowance. Medical officers could be offered financial incentives. such as payment for travel. to carry out community health work. (HC)

2258 **Carruthers, I.D.** *Water supplies and public health.* In Carruthers. I.D.. Impact and Economics of Community Water Supply: a Study of Rural Water Investment in Kenya. Ashford. England. Wye College. Agrarian Development Studies No.6. 1973. 43-55. Engl.

The public health economics of providing safe water are difficult to calculate: on the one hand. a safe water supply is not sufficient to ensure good health. but. on the other hand. an unsafe water supply guarantees poor health. Polluted water is the source of water-borne (cholera. typhoid. etc). water-washed (ascariasis. trachoma. etc.). water-based (schistosomiasis. guinea

worm). and water-related diseases (malaria. onchocerciasis. etc.). The significance of these threats varies from country to country depending on natural and acquired immunity. concentration levels of contamination. epidemiologic patterns of disease. etc. In Kenya. for example. water-based and water-related. specifically schistosomiasis and malaria. are two of the most common and debilitating health problems. To eliminate these diseases. Kenya would have to invest not only in a safe water supply but also in health education. molluscicides and insecticides. and a protected and properly maintained water source. Other hidden costs include increased populations due to lower mortality. lowered natural immunity. etc. This is not to say that an investment in water is not valuable but that it should be assessed thoroughly and its benefits weighed against those possible from other investments. (AC)

2259 **Chaves. M.M.** W.K. Kellogg Foundation. Battle Creek. Mich. *Strategies for improving health in Latin America.* Battle Creek. Mich.. W.K. Kellogg Foundation. Sep 1976. 23p. Engl.

The W.K. Kellogg Foundation invests approximately 10% of its funds into Latin America and the Caribbean to support programmes in health. education. and agriculture; its philosophy in health investment is to focus on health care delivery and to encourage programmes extending or improving prevention. access. continuity. quality. or cost-effectiveness. The foundation urges projects to integrate health personnel training with provision of services and thus is working closely with training centres and universities. Some examples of foundation-supported programmes are community medicine instruction in seven universities. maternal child health services provided by three universities. and primary care for Planaltina (planned and implemented by University of Brasilia). (AC)

2260 **Gordon. J.B.** *Organization and financing of health services.* In Quinn. J.R.. ed.. China Medicine as We Saw It. Washington. D.C.. U.S. Government Printing Office. DHEW Publication No.(NIH) 75-684. 1974. 63-93. Engl. 89 ref's.

See also entries 2154. 2193. 2435. and 2501.

Financing health care in the People's Republic of China in theory is simple but. in practice. can be quite complicated. The underlying principle is that a comprehensive network of small autonomous units can be responsible for the health and welfare of all. The units. which in rural areas are communes and in urban areas may be residential or factory groups. comprise workers and their families. Workers contribute regularly to a health insurance fund, which defrays a portion of health care costs and covers the cost of social services. Workers also pay a nominal fee-for-service when they use any of the services: those who are unable to afford out-of-pocket expenditures can obtain either a loan or a grant from the health fund. The system works extremely well in rural areas where there is no overlap in services: however. accounting problems could conceivably crop up in cities where factory and residential health funds overlap. For instance. a father could contribute to a factory fund which covered services in the factory and which would reimburse him for care received outside the factory. while his wife. if she worked in a small factory. could contribute to residential health services through her factory. Both parents would be satisfactorily covered. but difficulties could arise in deciding which fund would pay for the care of their children. (AC)

2261 **International Hospital Federation. London.** *Planning and building health care facilities under conditions of limited resources.* World Hospitals (Oxford). 11(2-3). Spring-Summer 1975. 54-224: 11(4). Autumn 1975. 228-253. Engl.

At the Fifth International Public Health Seminar held in Nairobi in 1974. 45 experts and 200 participants from 50 countries examined inexpensive methods of constructing health care facilities. The seminar reports are set forth in two special issues of *World Hospitals*: they have been arranged so that the general papers on regional planning. economics. and attitudes appear first and lead up to more specific proposals. solutions. and practical details. The range of facilities discussed spans an entire industry from the adaptation of a traditional rondovel hut as a clinic in Kenya to the creation of a sophisticated medical centre. Two major themes that have been drawn from the papers are the value of regionalized health services and the importance of long-term planning. (AC)

2262 **Laugesen. M.** Coordinating Agency for Health Planning. New Delhi. *Better cost effectiveness in community health programmes.* New Delhi. Coordinating Agency for Health Planning. CAHP No.210. n.d. 13p. Engl. Unpublished document.

Suggestions for increasing the cost-effectiveness of India's hospitals and clinics include extending staff efficiency by instructing cleaners. drivers. clerks. etc.. in simple health procedures: employing unipurpose health workers for tasks and campaigns: and recruiting housewives as health workers and educators. Other possibilities are requiring minimal educational background for training so that literate local people can be incorporated. providing several services at once. and making use of waiting time for health. family. nutrition. etc.. education: designing treatment plans using low-cost prepared and pre-packaged medicines for the 10 most common illnesses: and ordering drugs and equipment from national rather than overseas sources. Clinics and hospitals are urged to reduce their dependency on foreign grants. which "always stop sooner or later." and to seek local support in the form of buildings and fees. In addition. money-making schemes. which may be attached to hospitals or clinics. are discussed. A list of solutions to problems is included as food for thought for the reader. (HC)

2263 **Segall, M.** Swedish International Development Authority. Stockholm. *Politics of health in Tanzania.* Development and Change (London).. 4(1). 1973. 39-50. Engl.

The discrepancies between Tanzanian intentions and actions in the area of health spending are pointed out and documented. Despite a stated intention to emphasize preventive and rural health services during the second 5-year plan. Tanzania devoted 75-80% of the health budget to curative medicine in the first 2 years. The approved and actual expenditures for the year 1970/71 indicated that expenditures for curative medicine and health administration exceeded budgetary restraints. whereas monies spent on preventive services. rural health centres. and medical training were less than approved amounts. However. lack of funds was the reason why only 5 of the proposed 80 health centres were completed during the first 5-year plan. After 2 years of the second 5-year plan. only seven more had been built. but two modern Western-style hospitals at Moshi and Mwanza were built and the cost of these modern hospitals would have furnished 200 health centres. Their operational costs. together with those of Muhimbili Hospital in Dar es Salaam. consume one-quarter of the total projected health budget. Although they are theoretically referral hospitals. such facilities only effectively serve those in their immediate vicinity. It is concluded that health is an area that has not yet been penetrated by Tanzanian socialism and that a redirection of effort toward the training of large numbers of auxiliaries for preventive work is called for. (HC)

II.6 Cultural Aspects

See also: 2210, 2228. 2250. 2286. 2394. 2485. 2659. 2661, 2711. 2716, 2720

2264 **Chen, P.C.** *Socio-cultural foundations of medical practice in rural Malay communities.* Medical Journal of Malaya (Singapore). 29(1). Sep 1974. 2-6. Engl. 11 refs.

The author describes traditional Malay concepts of disease and suggests a practical approach to melding traditions with modern medical practices. The first step is to determine whether a custom is beneficial. harmless. uncertain. or harmful. Beneficial customs. such as delaying cutting the cord of the newborn. should be encouraged; harmless ones. such as those concerned with warding off supernatural causes of disease. should be ignored; uncertain practices. such as taking indigenous remedies. should be left unopposed until proven harmful: and harmful customs. such as using a bamboo knife to sever the newborn's umbilical cord. should be dislodged slowly through friendly persuasion. Health educators are warned against exporting absurd beliefs from their own culture. such as preferring cow's milk to breast milk. substituting processed baby foods for home-cooked semi-solids. feeding infants with clockwork regularity. and enforcing rigid toilet-training. The author suggests that some conflicts can be resolved if they are clarified by a religious leader. (HC)

2265 **Garcia Manzanedo, H.** Pan American Health Organization. Washington. D.C. *Sociocultural characteristics of the rural population in Latin America: their influence and their relationship to health.* In Boletin de la Oficina Sanitaria Panamericana: English Edition Selections from 1968. Washington. D.C.. PAHO. 1969. 4-13. Engl. 11 refs.
Also appeared in Spanish in Boletin de la Oficina Sanitaria Panamericana (Washington. D.C.). Jan 1968. 39-48.

The traditional economic. social. and cultural aspects of rural life in Latin America are examined and their relationship to health is discussed. Rural attitudes toward sickness and health are generally based on notions of cause and effect and are bound up in ethical. moral. or religious beliefs. For example. disease may be perceived as an imbalance between bodily humours. a punishment of God. or the result of magic. These attitudes are rarely understood by an urban physician who enters the rural milieu; for this reason. along with the reticence of the rural dweller to consult an outsider. he cannot compete with the traditional healer who comes from the milieu. knows the people. and charges prices they can afford. The author concludes that the social and cultural characteristics of the rural population must be considered in plans to improve rural health. that locally recruited auxiliaries must be employed in health programmes. and that professional health personnel must accommodate the attitudes of rural dwellers. (HC)

2266 **Guidotti, T.L.** *Health care for a rural minority: lessons from the Modoc Indian country in California.* California Medicine (San Francisco). 118(4). Apr 1973. 98-104. Engl. 33 refs.

Obstacles to providing the American Indian minority in Modoc County (USA) with health care are discussed. These arise from the Indians' unsatisfactory levels of income. housing. cultural expression. and self-determination: in addition. environment-related diseases. work-related injuries. unemployment-related mental health problems. and alcohol-related accidents are prevalent and aggravated by the lack of emergency medical care and the Indians' mistrust of Western medicine. It is suggested that the Indian must be recruited into the health care system. i.e.. educated regarding the availability of services. the potential for cure and relief. and the role of the patient in monitoring and treatment. Ways to adapt Western medicine to traditional Indian concepts of health and disease are suggested and the catalytic potential of the Modoc-Lassen Indian Development Committee is discussed. The committee is a health services support organization that helps the community deal effectively with outside agencies through the medium of community health aides. (HC)

2267 **Klintworth, C.** *General medical care in China.* Australian Nurses' Journal (Melbourne), 4(3), Sep 1974, 33-35. Engl.

Workers in the People's Republic of China generally fall under one of three health insurance systems. Employees in state-controlled working units such as factories and mines are covered by the National Labour Insurance Regulations, which stipulate that the place of employment must pay all medical and hospital fees except meals. The employer also pays half of these expenses for a worker's dependents. Government employees (most urban workers), students, and injured veterans of revolutionary wars receive free medical care, although their dependents must pay their own costs. Women in this group are also protected by national legislation, which guarantees them, among other benefits, 56 days paid maternity leave. Rural workers in commune production brigades contribute yearly to a cooperative medical care system that pays all contributors' medical bills. The barefoot doctor is the principal health worker in rural areas and the author describes the various functions the barefoot doctor can assume. (RMB)

2268 **Leslie, C.** *Professional and popular health cultures in South Asia: needed research in medical sociology and anthropology.* In Morehouse, W., ed., Understanding Science and Technology in India and Pakistan, New York, University of the State of New York, Occasional Publication No.8, 1967, 27-42. Engl. 49 ref's.
See also entry 2440.

A survey of published research on the medical sociology and anthropology of South Asia indicates the need for more studies of the impact of modern medicine on traditional societies. Modern medicine has produced a byproduct, or "health culture," that disdains the practice of indigenous medicine and thus prevents the upgrading, standardization, and utilization of traditional practitioners. Therefore, medical practice is limited to a few Western-style doctors and is not acceptable to the beliefs, values, and knowledge of the people. Research into popular health cultures, however, would foster communication between modern and traditional medical practitioners and could point the way to effective improvements in the existing systems. (ES)

2269 **Muecke, M.A.** *Health care systems as socializing agents: childbearing the North Thai and Western ways.* Social Science and Medicine (Oxford), 10, Jul-Aug 1976, 377-383. Engl.

A city in northern Thailand provided the background for a case study of both the socializing effects of traditional and Western medicine on childbearing practices and the use of cultural attitudes in promoting health education and family planning. Behavioural and attitudinal elements of traditional medicine included the view of childbirth as a family crisis precipitated by supernatural moral forces. According to this view, the whole family had to be involved in the birth of a child for the event to be successful. Western medicine views pregnancy as an individual's physical problem to be treated by sophisticated technology. These two views should be melded, especially since hospital facilities and the number of Western-style deliveries has increased enormously in the past few years. By 1974, of 263 poor urban women studied, more than 33% gave birth in hospital and 15% in a home delivery supervised by a Western-trained nurse or doctor. This increased reliance on Western medicine reveals the effects of urbanization and the perceived success of the Western method of preserving maternal and child health. The hospital has become an important health care institution to many women through its obstetrical services and it could also become a centre of health education and family planning motivation. However, it should incorporate the emotional and physical family involvement found in the traditional Thai model. This would provide familiar comfort for new mothers during delivery and soften the impact of the cultural changes. (ES)

2270 **Papua New Guinea, Department of Public Health, Biddulph, M., ed(s).** *Readings for psychiatry in P.N.G.: tutor reference nursing education.* Port Moresby, Department of Public Health, Dec 1972, 128p. Engl.
See also entries 2500, 2508, 2519, 2589, 2596, and 2618.

This compilation of articles on mental health in Papua New Guinea discusses, from a European's point of view, mental disorders and their treatment, folk psychiatry, psychiatric examinations, and alcohol abuse and use. It also includes: notes on preventive mental health, aetiology, history taking; traditional practitioners; and psychiatric hazards of social change. The information has been assembled to provide background for nurse educators and practitioners, because the value of understanding the beliefs and cultural basis surrounding mental disease has been demonstrated repeatedly. (AC)

2271 **Pulsford, R.L., Cawte, J.** *Health in a developing country: principles of medical anthropology in Melanesia.* Milton, Qatar, Jacaranda Press, 1972, 188p. Engl.

This book examines the health of the people of Melanesia as it relates to their ecology, beliefs, stresses, and maladjustments; traditional medicine; and their progress toward modernization. Intended for use in a course for 2nd- or 3rd-year medical students at the Papuan Medical College, it is also suitable for other health workers and community development personnel. The aim of the publication is to introduce health ideas and vocabulary and to view health and illness in the context of culture. The format of the chapters is designed to promote discussion; the main topics, such as "Building an economy" and "Population at risk," are broken down into diverse components that are briefly elaborated. An index and a glossary are appended. (AC)

2272 **Romero Alvarez, H.** Pan American Health Organization, Washington, D.C. *Coordination in the teaching of sanitary engineering.* In Boletin de la Oficina Sanitaria Panamericana: English Edition Selections from 1968, Washington, D.C., PAHO, 1969, 47-51. Engl.
Also appeared in Spanish in Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 65(1), Jul 1968, 46-51.

The institutions of higher learning in Latin America should cooperate with ministries responsible for environmental health. Although communications already exist at the professional level, there is a need for coordination at the undergraduate level. Potential coordinated activities include organized student visits to water supply and sewage works under construction, student participation in studies being conducted by the ministries, utilization of ministry-produced designs as teaching material in the university, and in-service training at the ministry for advanced students. Through such activities students could benefit from the technical supervision of the ministry staff and early involvement with national problems and ministries could benefit from a valuable source of direct bibliographic material. (HC)

II.7 Epidemiological, Family Planning, MCH, and Nutritional Studies

See also: 2108, 2115, 2180, 2184, 2190, 2206, 2207, 2215, 2216, 2243, 2244, 2245, 2258, 2329, 2337, 2342, 2355, 2394, 2399,2400, 2414, 2417, 2525, 2536, 2537, 2539, 2540, 2542, 2544, 2547, 2548, 2550, 2551, 2552, 2553, 2556, 2557, 2559, 2561, 2635, 2637, 2642, 2644, 2653, 2659, 2661, 2763, 2774, 2780, 2791, 2795

2273 **Andhra Mahila Sabha, Madras.** *National Health Seminar: proceedings.* Madras, Andhra Mahila Sabha Nursing Home, 17 Oct 1966. 205p. Engl.
National Seminar on the Role of Voluntary Agencies in the Implementation of Public Health, Medical Care, and Family Planning Programmes under Five-Year Plans, Madras, India, 29-31 Dec 1965.

Representatives of government and voluntary organizations in India met in December 1965 to discuss coordination of their activities toward the health goals of the fourth 5-year plan. More than 100 health officials participated and they examined the role of voluntary agencies in family planning, school health, nutrition, and communicable diseases control. They also discussed common problems, fund-raising, personnel, and training. Recommendations and reports were forthcoming from each discussion, but the three major resolutions adopted unanimously were that coordinating councils chaired by a nonofficial in government be set up but funded for the first 2 years by government at state and national levels, that a national register of voluntary agencies be compiled and published, and that a committee of five be established to ensure the realization of the first two resolutions. The background papers, which provided the statistical base for seminar recommendations, are included and articles on specific programmes in India are appended. (AC)

2274 **Andrews, R.** *Food and nutrition activities in Trinidad and Tobago.* Cajanus (Kingston, Jamaica), 9(3), 1976, 158-163. Engl.

Trinidad and Tobago have developed a food and nutrition policy that promotes self-sufficiency in food sources, nutritional supplements for vulnerable groups, and increased and improved facilities for dealing with diseases caused by nutritional deficiency. Based on this policy, the National Nutrition Council, which includes representatives from all organizations involved in food and nutrition, currently supports several projects: the establishment of small-scale, community marketing, preserving, and processing units in rural areas; a pilot project to determine the economic feasibility of large-scale, highly mechanized systems of producing corn, soya beans, and sorghum; a programme to bring 30 000 acres of land into rice production and to provide incentives to farmers for producing rice; the development of a composite of local flours as nourishing as wheat; a pilot project to manufacture weaning foods from local produce; and the establishment of a system of day care centres in socially deprived and nutritionally vulnerable areas. This last project aims to provide a protective environment and an adequate diet for children of working mothers; the first centre will be operating in 1977 and will accommodate 60 children. (HC)

2275 **Appudurai, S.** Federation of Family Planning Associations, Kuala Lumpur. *Integration of family planning in health services: health and family planning.* Kuala Lumpur, Federation of Family Planning Associations, Jan 1971. 4p. Engl.
Unpublished document; see also entries 2289, 2302, 2525, 2531, 2532, 2533, and 2543.

The detrimental effects of frequent childbearing are documented by research findings from various countries and are illustrated in maternal mortality, which increases with age, parity, and descending social class: rates of rupture of the uterus, postpartum haemorrhage, preeclamptic toxaemia, anaemia, etc.; early foetal deaths which increase sharply after the eighth pregnancy and are highest when the interval between pregnancies is less than 1 year; postnatal deaths, which also increase with parity; and malnutrition, which increases in families with four or more children. However, according to the author, the best indication of the need for family planning is the number of abortions: for example, an estimated 8% of annual pregnancies in Singapore alone. The author urges medical and allied health professionals in Malaysia to spread information on the health benefits of family planning and to make methods available to the rural peoples. (HC)

2276 **Arya, O.P., Bennett, F.J.** *Role of the medical auxiliary in the control of sexually transmitted disease in a developing country.* British Journal of Venereal Diseases (London), 52(2), 1976, 116-121, Engl, Refs.

Venereal diseases (VD), which are common in many developing countries, have become more resistant to control measures due to inadequate care – inefficient treatment schedules, high default rates, poor contact tracing, and people's reluctance to seek treatment. To date, they have not been recognized as communicable diseases and have not been handled accordingly with greater emphasis on health education, early diagnosis, adequate treatment, and contact tracing. However, they can be controlled by concerted efforts of health personnel. Key workers in control measures are medical assistants and their training should include procedures for relevant history-taking, examination, diagnosis; and treatment of common venereal diseases; they should also be taught to refer manifestations that require more competent care, to maintain complete records, to locate VD contacts, and to chart local distribution and determinants of VD. They should be encouraged to promote VD education in secondary schools, antenatal sessions, child health clinics, etc.; to oversee and supervise VD treatment and contact-tracing in dispensaries and subcentres; and to support VD campaigns where they are warranted. Their work would be greatly facilitated if cheap, effective, safe, simple, and standard treatment regimens were established. (HC)

2277 **Ashley, J.** *Mwanamugimu Nutrition Clinic.* Appropriate Technology (London), 2(1), May 1975, 16-18, Engl.

See also entries 2400 and 2772.

At the Mwanamugimu Nutrition Clinic (Uganda), founded in 1965, the practical education of mothers is an essential part of treatment of children suffering from malnutrition. Each mother participates in rehabilitating her child; she learns about the types and amounts of food that her child needs, where she can obtain it, and how to prepare it nutritiously. She is encouraged to make simple modifications in the family diet and receives guidance from a medical social worker and an agriculturalist. Their assistance is especially important for overburdened mothers who have little or no land or money. (MG)

2278 **Asociacion Chilena de Facultades de Medicina, Santiago. Organizacion Panamericana de la Salud, Washington, D.C.** *Informe final: Seminario de Informacion Cientifica en Medicina. (Final report: Seminar on Scientific Information in Medicine).* Santiago, Asociacion Chilena de Facultades de Medicina, 1973, 91p. Span.

Seminar on Scientific Information in Medicine, Santiago, Chile, 25-26 Apr 1973.

In 1973, the Chilean Association of Medical Schools, with the help of the Pan American Health Organization, sponsored a seminar on the information resources of Chile with an eye to creating a national biomedical information system. The final report of the seminar contains the proceedings and the texts of the papers presented. Recommendations from the seminar include the following: that a national biomedical information system be organized by the universities, that a national centre for coordinating biomedical information be established and given the first task of compiling and publishing a comprehensive bibliography of medical periodicals available in Chilean libraries, that a national medical library be founded and existing libraries expanded and new emphasis be put on interlibrary loan agreements and the acquisition of foreign materials, that health students be trained in the proper use of library facilities, and that more librarians be educated and paid according to their professional qualifications. (RMB)

2279 **Austin, J.E.** *Food and nutrition policies in a changing environment.* World Review of Nutrition and Dietetics (London), 25, 1976, 108-141, Engl.

World food and nutritional policies must be drafted in the near future to curb the adverse effects of the food shortage forecast for the 1970s. Already, the lack of policies precipitated a famine in 1972 that touched most of the developing world and universally afflicted the most vulnerable members of the population – under-fives and pregnant and lactating women. Policies should define reserves, food aid, production stimulation, demand management, and trade regulations and they must reconcile the conflicting interests of multiple groups, such as farmers, consumers, etc. Policymakers should identify target groups, set priorities, draw up a time frame, and consider the effects of one sector's policies on those in another. Then they must institute strategies based on the aetiology of malnutrition, resource availability, and projected food system dynamics. (AC)

2280 **Barrett, H.** *Health education: a campaign for radio study groups in Tanzania.* Educational Broadcasting International (Oxford), Jun 1974, 90-92, Engl.

A mass public education campaign in Tanzania relied on the popularity of radio to spread information about the causes and prevention of common communicable diseases and encouraged national literacy by providing textbooks to accompany the programmes. Supported by the Ministries of National Health and Social Welfare and of National Education, the 12-week radio series ran from April to August 1973 and reached approximately 2 million adults gathered in study groups of 7-15 people. This response was generated by extensive publicity on the radio and in newspapers, which motivated interest in the series by stressing the beneficial results of safe health practices on family, village, and national life. Each group chose a literate leader and training sessions prepared these leaders to lead discussions, to use the textbooks that were distributed, and to

prepare reports for evaluation of the campaign's success. The study programme, tied in with relevant textbook sections, created listening interest by utilizing the experiences and words of ordinary people and provided practical objectives such as clearing refuse from the villages and digging latrines. These objectives encouraged community self-reliance and self-sufficiency in initiating preventive health measures. The programme has yet to be evaluated, but the widespread response indicates its success. (ES)

2281 Belcher, D.W., Wurapa, F.K., Atuora, D.O. *Endemic rabies in Ghana: epidemiology and control measures.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.). 25(5). Sep 1976. 724-729. Engl. 21 ref's.

In 1975, a rabies epidemic in Ghana stimulated a study of the causes and prevention of the disease. The sources, pattern, and incidence of rabies were established through an analysis of Accra's canine vaccination and dog control programmes, a survey of the monthly bulletin of the Ministry of Health from 1969 to 1974, and an investigation of the medical records of 51 hospital patients who had suffered from rabies between 1963 and 1975. These records revealed patient variables, type of dog, site of wound, length of incubation period, preadmission treatment, and clinical manifestations. From all these sources a seasonal pattern of rabies emerged; dogs proved to be the prime carriers and children and men the victims. Canine vaccination shortage and failure, lack of owner cooperation, a very large stray dog population, and little educational and post-bite services compounded problems and made prevention difficult. To combat these problems, a health plan that integrates medical, veterinary, and municipal dog control services and includes education, prevention, and treatment programmes is recommended for the peak season each year. (ES)

2282 Bolivia, Ministerio de Prevision Social y Salud Publica. *Diagnostico de la situacion de salud materno infantil. (Diagnosis of the maternal and child health situation).* La Paz, Ministerio de Prevision Social y Salud Publica. Division Nacional Materno Infantil y Bienestar Familiar, 1975. 54p. Span.

These statistics on maternal and child health in Bolivia were compiled to provide a basis for programme planning during the 5-year plan commencing in 1976. Although they are incomplete, they indicate priorities for future health action; for example, they estimate the fertility rate at 215 pregnancies per 1 000 women of reproductive age, the birthrate at between 38.5 and 44 per 1 000 population, infant mortality at 154.6 per 1 000 live births, and maternal mortality at 48 per 1 000 live births. Other findings were that 0.6% of the causes of infant deaths were eradicable, 11.4% reducible by means of health interventions, 35.2% reducible by means of interventions in some other sector, and 52.6% irreducible; similar figures for children aged less than 5 years were 2.02%, 18.77%, 47.44%, and 31.76%. Only 29.9% of women receive prenatal care and only 22.8% of children aged less than 1 year receive medical attention. Other data concern the demographic characteristics of the population; the socioeconomic characteristics; health resources in terms of facilities, manpower, and funds; nutrition; and environmental sanitation. (HC)

2283 Brink, E.W., Miller, D.C., Lane, J.M. *Improvised measuring board, suitable for the field.* Tropical Doctor (London). 7(2). Apr 1977. 96. Engl.

A Georgia (USA) medical centre has developed a reasonably-priced, portable, and durable apparatus for accurately measuring child height-length in the field. It consists of a board constructed of plywood and pine that weighs about 15 pounds and costs approximately U.S. $60. It can be constructed by local carpenters wherever the materials are available. A detailed plan can be obtained by writing to Preventable Diseases and Nutrition Activity, Centre for Disease Control, Atlanta, GA 30333, USA. (HC)

2284 Browne, S.G. *Leprosy programmes in the context of endemic disease control.* Leprosy Review (London). 45(3). Sep 1974. 201-204. Engl. 10 refs.

International Congress of Tropical Medicine and Malaria. Leprosy Section. Athens, Greece, 14-21 Oct 1973.

The present disillusionment with leprosy control can be attributed to the failure of early mass campaigns, the inability to transplant regional solutions, the lack of attention to social aspects, and the population explosion in endemic areas. New approaches must be based on knowledge of the natural history of leprosy, socioeconomic factors, hygiene standards, and the population's attitudes. The diagnosis is difficult, the treatment lengthy and often unrewarding, and often a social stigma is attached to the disease. Thus far, various approaches have been used in disease control programmes: these include complete, selective, or partial segregation of the leper; special leprosy services in areas where prevalence is high; programmes that combine leprosy treatment with that for another specific disease such as tuberculosis; integrated programmes that treat leprosy with all other infectious diseases; and self-treatment in isolated areas with poor communications. At present, the most satisfactory drug therapy has been to render noncontagious all patients with multibacillary leprosy by means of bacteriostatic drugs; other means are discussed. (RMB)

2285 Buchanan, R. *Breast-feeding: aid to infant health and fertility control.* Population Reports (Washington, D.C.). Series J(4). Jul 1975. J49-J68. Engl. 141 ref's.

Breast-feeding as the most nutritious, health-promoting, emotionally satisfying, and inexpensive method of infant feeding has been well documented; yet in many parts of the world, especially in urban areas of developing countries, its practice has been steadily and destructively declining. The reasons are numerous, including the transfer of Western social attitudes, the promotion

of commercial baby foods, the lack of strong support from health workers, and the widespread acceptability of inflexible work schedules; rarely are there physiological reasons for not breast-feeding. In fact, it has been estimated that 95% of women are physically capable of breast-feeding, although the physiology of lactation and the hormonal relationships in milk production are not totally understood. It is known that estrogen, progesterone, and lactogen produced by the placenta during pregnancy stimulate the production of necessary glandular tissue and ducts and that the expulsion of the placenta signals a rise in prolactin and the onset of milk production. If a woman chooses to use her capability fully, she can provide the infant with protection against infectious diseases and can partially protect herself from immediate pregnancy. The latter protection is precarious, however, and should be supplemented by the use of condoms, IUDs, or progestogen-only contraceptives. (AC)

2286 Celestin, H.N. ***Programa de control de la esquistosomiasis en Santa Lucia: exito de la accion educativa.*** *(Santa Lucia schistosomiasis control programme: success of health education).* International Journal of Health Education (Geneva), 19(4), Oct-Dec 1976, 248-259. Span.

In 2 years (1971-1973), the Santa Lucia Ministry of Health succeeded in breaking the schistosomiasis disease cycle in five rural communities by means of clean water services and a massive health education campaign. First, uncontaminated water was made available and later, when villagers continued to bathe and do laundry in infected streams and rivers, a health education campaign was launched. Teachers were trained in special seminars and were encouraged to devote 1 hour per month to instructing their students about schistosomiasis and other parasitic diseases. After 6 months, a student survey was undertaken; it compared knowledge exhibited by a control population with that of students in the programme. As predicted, findings revealed an increase in knowledge among students in the programme. The most significant result of the health education classes, however, was a change in behaviour. Students ceased all contact with contaminated water except during banana harvest when they had to cross the river frequently. The following year, the school programme was expanded and a student survey carried out. At the same time the village closest to the river was surveyed to ascertain villagers' knowledge of schistosomiasis and their attitude toward river versus piped water. Community meetings, films, and family interviews aimed at housewives were introduced and as a result the entire population soon began to use the public laundry and bathing facilities instead of the river. When the new health practices became habitual, the schistosomiasis cycle was broken and the few remaining cases could be treated without risk of reinfection. (RMB)

2287 Chinese Medical Association, Peking. *Child health care in new China.* Chinese Medical Journal (Peking), 1(2), Mar 1975, 81-94. Engl.

Fourteenth International Congress of Pediatrics, Buenos Aires, Argentina, 3-9 Oct 1974.

A review of child health in the People's Republic of China shows striking accomplishments since 1949. Morbidity figures for communicable diseases such as measles, pertussis, etc., have sharply declined and smallpox and cholera have been eradicated. Other figures show increases in average birth weight, improved growth patterns, and lower mortality – for Peking alone mortality has dropped from 117 per 1 000 births to 12. The overall picture is one of infant improvement and is due to concentrated efforts of health personnel, advances in traditional medicine and combination with Western treatment, and mass public health programmes. However, the underlying impetus has come from the political, economic, and cultural development that has been made possible by China's self-determination and freedom from imperialism and neocolonialism. (AC)

2288 Cutting, W.A. *Immunisation and family planning through an under-fives' clinic.* Indian Pediatrics (Calcutta), 11(7), Jul 1974, 495-500, Engl. 12 refs.

The first part of this paper deals with special considerations and new developments in immunization and how they are relevant to India and the second explores immunization as an opportunity to promote or reinforce family planning. The author comments that oral polio vaccine is less effective in India than in temperate countries and considers the possibility that a significant proportion of vaccines are not active due to heat or light exposure during storage and transport. He also suggests ways of combatting such problems. New developments in immunization include a jet injector that needs to be sterilized only once a day and can be used for unlimited inoculations. In addition, antigenic response for tetanus toxoid and DPT vaccines administered intradermally using a jet injector can be elicited by one-fifth the normal dose. Samples of a weight chart and an immunization schedule, with appropriate moments for the discussion of family planning indicated on them, are included. (HC)

2289 Federation of Family Planning Associations, Kuala Lumpur. *Plan for integration of family planning with the general health services.* Kuala Lumpur, Federation of Family Planning Associations, n.d. 1v.(various pagings), Engl.

Unpublished document; see also entries 2275, 2302, 2525, 2531, 2532, 2533, and 2543.

The National Family Planning Board in Malaysia proposed that family planning be integrated with health services but that initial studies be undertaken to determine the nature, extent, and level of integration possible and the administrative and educational implications of integration. The board urged action studies in four areas of the country to cover such aspects as the acceptability of oral contraceptives, intrauterine devices, and contraceptive injections; the effectiveness of using paramedical and auxiliary health staff in the distribution of contraceptives; and the usefulness of rural

health personnel in an educational campaign. It also recommended a service demonstration whose aim would be to determine what the specific role of each category of health personnel should be after integration and whether existing staff could bear the workload inherent in integration of services. The role of the board's personnel – a medical officer, trained assistant nurse, and regional information officer – in such studies would be mainly supervisory, supportive, and educational. Further details of both studies and service demonstration are appended. (HC)

2290 **Fehrsen, G.S.** *Malnutrition in South Africa: some thoughts on the problem.* South African Medical Journal (Cape Town), 49(54), 20 Dec 1975, 2221-2224. Engl. 25 refs.

Although research into malnutrition in South Africa has been under way since 1930, programmes to implement the findings have been slow in coming. For instance, in 1952, when research revealed a connection between pellagra and the lack of B-complex vitamins in the popular diet of maize, it was recommended that methods of fortifying maize meal be explored. The government agreed but did not take serious action until 1964 and it was not until 1971 that enriched maize meal was demonstrated as effective in reducing vitamin deficiencies. In 1973, the government declared a policy of enriching maize but had not yet implemented it in 1975. The author deplores the government's inaction and suggests that clinicians, dietitians, and researchers promote nutrition; that the Department of Health formulate a long-term, ecologically oriented, and explicit nutrition policy for the whole country; that the Department of Health endeavour to provide statistics on the extent of malnutrition; and that the Department of Agriculture and the private sector be encouraged to produce and market nutritious rather than luxury and inessential foods. (HC)

2291 **Fisek, N.H.** Hacettepe University, Ankara. *Account of the activities of the Etimesgut rural health district 1970-1974.* Ankara, Hacettepe University, School of Medicine, Institute of Community Medicine, 1975. 38p. Engl.

This report covers health activities in the Etimesgut rural health district (Turkey) between 1970 and 1974. The services are run jointly by the Ministry of Health and Hacettepe University; the university provides medical personnel and hospital services and the Ministry of Health staffs and finances the district health office and health units. The district is described in terms of geography, population, educational levels, economic and environmental conditions, nutritional status, and health organization. Demographic and epidemiological information is presented and includes analyses of causes of deaths, communicable diseases, and morbidity statistics and studies. A section on health services and patient care deals with maternal child care, family planning, infant deliveries, vaccinations, patient care, laboratory services, dental care, X-ray services, and student training. Yearly expenditures and an appendix of diseases and health emergencies are included. The report contains copious statistical data. (RMB)

2292 **Hasselblad, O.W.** *Worldwide distribution of leprosy: its impact on world health.* CUTIS (New York), 18(1), Jul 1976, 46-50. Engl.

The author discusses the worldwide epidemiology of leprosy and points out three serious barriers to the control of the disease in developing countries. The first is the continued use of leprosariums, excessively expensive institutions that have been rendered unnecessary by the availability of outpatient treatment and serve only to perpetuate the belief that lepers must be segregated, thus discouraging them from seeking medical care. The second is the inadequate attention that leprosy receives in the medical curriculum: an occasional visit to a nearby leprosarium where students see only extreme cases of neglected or mistreated leprosy. The third is the fact that, in a context of scarce resources, the control of the acute killing diseases is naturally more imperative than the eradication of leprosy. The author recommends that leprosy facilities be integrated into general medical facilities and that increased effort be expended on education at the individual, professional, and public levels. Some facts regarding the actiology and prevalence of leprosy are included. (HC)

2293 **Hemachudha, C., Rosenfield, A.G.** *National health services and family planning: Thailand, a case study.* American Journal of Public Health (New York), 65(8), Aug 1975, 864-871. Engl. 32 refs.

Without full-time workers, public information activities, or incentives, Thailand has achieved impressive family planning acceptance rates by integrating its family planning services into the national health infrastructure. Between 1968 and 1970, all professionals and auxiliary health personnel received courses in population dynamics and methods of contraception; family planning clinics were opened in the provincial hospitals and in all rural health centres staffed by a physician. Also, auxiliary midwives were trained in information dissemination and motivation; later, they learned procedures for prescribing and distributing oral contraceptives. Between 1968 and 1974, the number of acceptors rose from 47 000 to 460 000 and yearly continuance rates (76% for the intrauterine device and 68% for the pill) have been among the highest reported from national programmes in Asia. Success is attributed to an active postpartum programme and the extensive utilization of nursing and auxiliary personnel, who are both physically and socially more accessible to acceptors than are physicians. (HC)

2294 **Hornabrook, R.W.** *Influence of health and nutrition on learning and productivity.* In Ward, M.W., ed., Change and Development in Rural Melanesia, Canberra, Australian National University and Port Moresby, Papua New Guinea, University of Papua and New Guinea, 1972, 41-50. Engl. 21 refs.

Fifth Waigani Seminar, Port Moresby, Papua New Guinea, 14-20 May 1971.

Although increased productivity and economic development have contributed to a general improvement of health levels in Papua New Guinea, the author cautions that uncontrolled and erratic changes in the country's nutritional patterns could cause more health problems than they cure. At present, infectious diseases, malaria, and accidental injuries are the most serious health problems for Papua New Guineans, who are remarkably free from the chronic debilitating diseases typical of Western society. While nutritional deficiencies, such as protein and caloric malnutrition and anaemia, are rampant, the inhabitants seem to have adapted to them, principally by developing a slow rate of growth and maturation and a small physical structure. Nitrogen-fixing bacteria in the small intestine also help the Papua New Guinean to compensate for lack of protein by converting nitrogen directly into amino acids. Sudden influxes of alternative protein sources into the native diet could lead to the loss of these adaptive mechanisms and to a dependence on imported animal protein, which, if suddenly withdrawn, could result in severe protein-deficiency diseases in Papua New Guineans who were previously protected. The same is true of unsupervised caloric increases. The author advises careful, long-range planning in the fields of health and economic development to avoid disrupting natural adaptive patterns. (RMB)

2295 **Jelliffe, D.B.** *Delivering the services.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 20(3), Jun 1974, 130-134. Engl. 37 refs.

Forty years ago Dr. Cicely Williams began calling for child nutrition programmes based on principles that in 1973 were formally advocated by the Zagreb Guidelines. These included: adaptation to ecology; reliance on community participation; operation within economic restraints; integration with maternal child health activities in health services; comprehensive in aim, at risk in focus; acceptance of education as primary role; practical training of staff; guidance by evaluation; and concordance with medical nutrition and development planning. Unfortunately, some of her important theories still have not been recognized. For example, she has repeatedly pointed out that malnutrition in young children is usually not the result of inadequate diet alone, but rather of diet combined with dehydration, intestinal parasites, improperly prepared and indigestible foods, or simple dyspepsia. She has also stressed the need for individual variation in diet and for allowing a child to build up a tolerance for recommended foods during weaning. The author recommends that more attention be given to these ideas and praises Dr. Williams' many contributions to the field of child nutrition. (RMB)

2296 **Kanani, S.** *Health education in Kenya today.* Kenya Journal of Adult Education (Nairobi), Sep 1973, 15-24. Engl.

The Kenyan government employs a two-pronged programme for public health education to publicize family planning and health, communicable disease prevention, sanitation, and proper nutrition. One prong is hospital- or clinic-oriented: pregnant women, mothers of sick children, and other patients receive advice from specially trained auxiliary health workers during the course of medical examinations, group meetings, and home and school visits. The other prong supplements these activities through radio and television programmes, public exhibits, and seminars conducted by voluntary organizations. These broadcasts and demonstrations reach approximately one-fifth of the population, but their effect has been difficult to evaluate. An investigation of current attitudes and public health practices is under way to determine the nature of future educational programmes and preventive medicine is receiving emphasis in the training of all auxiliary health workers to prepare them for their roles in health education. (ES)

2297 **Koppert, J.P.** *Nutrition rehabilitation: its practical application.* London, Tri-med Books, 1977. 130p. Engl. 79 refs.

See also entries 2298 and 2400.

This inexpensive but substantial book is a guide for planning and organizing nutrition rehabilitation programmes, including live-in nutrition centres where undernourished children and their mothers learn healthy living. It offers detailed advice on such topics as choosing a site for live-in centres, procuring finances, selecting staff, designing diets, keeping records, and evaluating progress. It also recommends ways for promoting good nutrition in home visiting, day care, and hospital ward settings and includes a wealth of down-to-earth suggestions for teaching mothers to manage their resources effectively. These suggestions cover food preparation, household budgeting, home gardening, means of improving the family income, ways for health workers to give personal support to mothers in changing habits, enlisting the fathers' cooperation, etc. The text is well supported by photographs, diagrams, and recommendations for further reading that include references to planning diets. (AB)

2298 **Koppert, J.P.** Zambia, National Food and Nutrition Commission. *Nutrition rehabilitation village.* Lusaka, National Food and Nutrition Commission, 1972. 25p. Engl.

See also entries 2297 and 2400.

In Zambia, the Makeni Nutrition Rehabilitation Village provides a practical approach to combatting malnutrition. It operates regular 3-week programmes for undernourished children and their mothers during which mothers learn how to achieve health by better living and eating habits rather than by attending hospitals and taking medicines. The programme's methods are to use only locally acceptable and economically realistic foods, housing facilities, fuel sources, etc., and to teach by example. Participants gain practical experience in cooking, eating, gardening, budgeting, and housekeeping routines that can be continued when they

return home. Two housemothers with primary school and homecraft education run the programme and are supported by part-time health and social workers. A registered nurse who visits daily has overall responsibility for planning, administration, liaison with other local services, and home visiting before and after admission. Although the Makeni programme should not be copied uncritically, details of staff responsibilities and routines, the feeding programme for both children and mothers, record-keeping procedures, and suggested guidelines for setting up a nutrition rehabilitation unit elsewhere are appended. (AB)

2299 **Lomholt, G.** *Venereal problems in a developing country.* Tropical Doctor (London). 6(1). Jan 1976. 7-10. Engl. 8 refs.

At the venereal disease clinic, Mulago Hospital, Kampala, paramedical staff have been employed to diagnose gonorrhea and syphilis using microscopes, to trace contacts, and to administer standard courses of treatment. Single treatments (probenecid 1g, followed shortly by an injection of sodium benzyl penicillin 5.0 mega units in lignocain given intramuscularly) have been given to patients with gonorrhea and have resulted in a very high success rate. In 1972, 19 000 of an estimated 60 000 cases of gonorrhea and 2 040 of an estimated 6 000 cases of syphilis were seen in Kampala alone. Incomplete coverage is attributed to the difficulty of discovering the asymptomatic patients; the difficulty of diagnosing gonorrhea in women; unsupervised self-treatment, which has led to the spread of resistant strains of venereal diseases; and the obstacles to tracing contacts. (HC)

2300 **Minkowski, A.** *Health of mother and child: the experience in the People's Republic of China, the Democratic Republic of Viet-Nam, and Cuba.* Impact of Science on Society (Paris). 23(1). Jan-Mar 1973. 29-41. Engl. 8 refs.

A French physician recommends the health care systems of the People's Republic of China, Vietnam, and Cuba as models for other developing countries because of their emphasis on self-care. In China, the entire population has become involved in health maintenance as a result of education, the work of the barefoot doctors, and the rotation of urban health professionals to the rural areas. The author cites some special programmes, social as well as medical, that have been introduced on a national level to limit births, control infant mortality, prevent toxaemia, and treat the pregnant and nursing mother. Vietnam has demonstrated a hopeful picture of maternal child health services in wartime. The public health system is organized into cooperative units, each with its own midwife, and supported by an educational system stressing individual responsibility and personal hygiene. Cuba, the only Latin American nation whose physician-population ratio corresponds to WHO recommendations, has achieved its low morbidity and mortality because of its emphasis on decentralization and the priorities accorded to doctors responsible for health in remote districts. (RMB)

2301 **Muncie, P.C.** *Doctors and dukuns, puppets and pills: a look at Indonesia's family planning program.* Washington, D.C., IBRD. 1972. 43p. Engl. 8 refs.

The Indonesian family planning programme has met with remarkable successes, considering the social and cultural obstacles facing it. Its history and recent accomplishments are set forth in this document. It has only recently gained government approval and support and many of the arguments leveled against it today, especially in the rural areas, are left over from previous governments. At present, the family planning programme is implemented locally by traditional birth attendants, maternal child health clinics, and specially trained family planning field-workers; it is administered nationally by the Indonesian Family Planning Coordinating Board and funded jointly by international agencies and the national government. (AC)

2302 **National Family Planning Board, Kuala Lumpur.** *How to establish a new clinic and in a new area.* Kuala Lumpur. National Family Planning Board. n.d. 6p. Engl.

Unpublished document; see also entries 2275, 2289, 2525, 2531, 2532, 2533, and 2543.

Factors to be considered in establishing a family planning clinic are the choice of site, accommodation, equipment, means of transportation, and the duties of the respective family planning workers. The choice of site should be based on the number of women needing the service, the number of deliveries per month (in general, 100 or more deliveries per month indicates the need for one family planning worker), the availability of a building, accessibility, etc. Minimal accommodation would include space for a waiting room, registration area, examination room, and lavatory; it would also be desirable to have an interview room, doctor's consultation room, room for sterilizing equipment, store rooms, staff room and office, and toilets. Necessary equipment is listed for transportation, furniture, and linen. Contraceptive supplies, drugs, and chemicals are also set forth and the duties and responsibilities of family planning nurses and workers are outlined. These include counseling in the maternal and child clinics, maternity wards, etc.; receiving, registering, and examining patients; managing the clinic; recognizing patients' sensitivities; and publicizing family planning services. (HC)

2303 **Okun, D.A., Ponghis, G.** WHO. Geneva. *Community wastewater collection and disposal.* Geneva. WHO. 1975. 287p. Engl. Refs.

The authors of this handbook on community wastewater collection and disposal have attempted a first step toward adapting existing technology to the resources available in rapidly developing countries. They have taken into account that their audience is characterized by limited financial resources, ample unskilled labour, limited engineering personnel, and a pressing need for other facilities, such as schools, roads, hospitals, and housing. They have directed their attention to public rather than individual sewage disposal systems

and have set forth guidelines for planning, designing, and constructing sanitation facilities. Financing mechanisms, management, hydraulics, standards, treatment and reclamation processes, and plant design are detailed for use by administrators and engineers. Appendices (1-5) include a model sewerage ordinance, a glossary of financing, sources of information on laboratory procedures, a checklist for plant design, and conversion factors. (AC)

2304 **Pan American Health Organization. Washington. D.C.** *Nutrition in small sizes: where the object is cheaper meat, we should give the production of small animals the attention traditionally reserved for cattle.* Pan American Health (Washington. D.C.). 7(2). n.d., 11-13. Engl.

Fish, rabbits, chickens, and rodents reproduce rapidly, provide all the amino acids required by the human body, and consume moderate amounts of food themselves. Thus, they represent enormous potential in agricultural projects aimed at reducing malnutrition in the Americas. They vary in their cultural acceptability, which ultimately determines their effectiveness, but they all can be cultivated at low cost by individuals or small groups. For example, a household production unit of rabbits, which would add 2-3 kg of meat weekly to the family diet, would be made up of five females and one male, a number that could be maintained satisfactorily by children. Another example is a pond of tilapia – fast-growing, algae-eating fish. It can be constructed with no more than hand labour and U.S. $3; however, fish culture has at times proved to be too far removed from traditional agricultural practices to be effective for the long term. (AC)

2305 **Pisharoti, K.A.** WHO. Geneva. *Guide to the integration of health education in environmental health programmes.* Geneva. WHO Offset Publication No.20. 1975. 81p. Engl. 45 refs.

This guide, which is intended for use by environmental health personnel, examines the need for health education in environmental health and discusses a design for planning, implementing, and evaluating programmes. The information is divided into three sections: the first deals with incorporating health education in programme planning and implementation: the second, with training and supervising environmental personnel so that they recognize the importance of health education and know how to provide it; and the third, with introducing environmental health education into a school system. This information is supplemented by eight appendices that comprise a health education glossary, some principles of health education planning, methods for identifying village leaders, steps for planning and conducting personal interviews, guidelines for providing health education to small groups, an overview of communications media, suggestions for planning or evaluating meetings, and notes on field training. (AC)

2306 **Rao, B.S., Tamhankar, B.A., Unune, S.M.** *Disposal of textile waste by low cost waste treatment methods.* n.p., 1975. 1v.(various pagings). Engl. 13 refs.
Unpublished document.

Two low-cost waste treatment methods have been tested in India and found suitable for rendering textile waste harmless: treatment in an anaerobic lagoon and treatment in an oxidation ditch. Both methods utilize unskilled manpower in building and need little upkeep. The lagoon has achieved a BOD (Biological Oxidation Deficiency) removal rate of 79% and the oxidation ditch reached rates of 93%. The major problem with both methods was the persistence of high pH levels in the waste products: it is suggested that mixing normal sewage with textile wastes would lower the alkaline level. (AC)

2307 **Riley, A.L.** *Role of the health official in land use planning: a prototype study.* Journal of Environmental Health (Denver, Col.). 39(4). Jan-Feb 1977. 249-254. Engl. 11 refs.

A health and land use project in Johnson County, Iowa, which was launched in 1973, underlines the importance of cooperation between health professionals and land use planners and serves as a model for land development. Project staff were a full-time employee from the health department and several students from the nearby university and they drew on expertise from environmental agencies, universities, and private firms. For the first 1 1/2 years, they studied current land uses, soils, geology, landscape, vegetation, wildlife, and water quality for four watersheds. (The data they gathered have since been used in national and regional planning operations.) The project's recommendations for future development incorporated environmental policies that covered water, soil and land stability, landscape, and wildlife. These provided that development should not result in inadequately treated discharges into water: that development in floodplains should be restricted to water-related recreation, woodland development, open space, and pastures; that buffer areas extending from streams should be safeguarded to intercept eroded soil and effluent from home sewage systems: that prime agricultural soils should be left in agricultural use: that steep slopes should be restricted from development: that natural and unique attributes of the land- and riverscape such as flora and fauna, topography, and hydrology should be optimally used: and that agricultural land management practices should permit wildlife to attain its proper diversity and biological balance. Evaluation of the environmental impact of the project has been undertaken by the health department. (AC)

2308 **Saliou, P., Breman, J.G.** *Surveillance epidemiologique des maladies transmissibles dans les pays tropicaux: les principes et une application pratique pour trois maladies soumises au Reglement Sanitaire International (cholera, fievre jaune et variole). (Principles of epidemiologic surveillance in tropical countries and practical application for*

three diseases under International Health Regulations). Medecine d'Afrique Noire (Paris), 24(2), Feb 1977, 93-116. Fren.

The first part of this article discusses epidemiologic surveillance techniques such as information gathering, both "passive" from reports and medical records and "active" from regular or special surveys; information processing and dissemination in printed or computerized form; and the establishment and evaluation of a surveillance network, including disease control measures. The second part describes a kit for cholera, yellow fever, and smallpox detection that can be used by medical auxiliaries. The symptoms and diagnosis of each disease are discussed in detail and a step-by-step procedure using the material provided in the kit is outlined for collecting the appropriate specimens from suspected cases. These specimens are then sent to a laboratory for analysis to confirm the diagnosis. This method of disease surveillance was inaugurated in Upper Volta in 1975 but has not yet been evaluated. Lists and photographs of the kit's contents are included in the text. Appendices contain simple disease surveillance forms. (RMB)

2309 Schendel, G., Alvarez Amezquita, J., Bustamante, M.E. *Medicine in Mexico - from Aztec herbs to betatrons.* Austin, Texas, University of Texas Press, 1968. 329p. Engl.

This history of medicine and medical and health services in Mexico is divided into three parts: Aztec medicine, Spanish colonial medicine, and modern Mexican medicine. Much of the third part is devoted to problems and accomplishments in the field of rural health. Most rural health problems fall into one of three categories of diseases of the poor: those due to lack of potable water and hygienic practices, e.g., diarrhea, parasitism, amoebiasis, typhoid, and cancer of the genitals; those due to malnutrition, e.g., urinary lithiasis, goitre, and cretinism; and those in which an important factor is inadequate housing or bad environment, such as tuberculosis, toxoplasmosis, rabies, and scorpion stings, which are fatal to children. In addition, there are the tropical diseases – leprosy, leishmaniasis, onchocerciasis, etc. – that prevail in the rural and jungle areas. Measures and campaigns used to combat each of these diseases are outlined and some institutions peculiar to Mexico, such as a hospital for bullfighters and a national lottery to pay for health and social welfare, are noted. A final chapter deals with Mexico's medical and nursing professions and medical research. (HC)

2310 Simon, J. WHO, Alexandria. *Men and medicine in the Middle East: a factual and pictorial assessment of what 20 countries are doing to raise their people's health standards and how the World Health Organization (WHO) is assisting them.* Alexandria, WHO, 1967. 241p. Engl.

The principal health problems in the Middle East and present efforts of governments and WHO-sponsored projects to overcome them are set forth in text and pictures. Subjects treated include: the medical heritage of the region; plans to overcome the shortage of doctors; disease control measures against cholera, smallpox, malaria, schistosomiasis, leprosy, tuberculosis, and trachoma; progress in psychiatric care; the existence of narcotic abuse; the search for better, cheaper foodstuffs and pure water supplies; occupational and industrial hazards; medical research; and the role of WHO's workers in stimulating health activities and propagating medical knowledge. Medical and paramedical training is emphasized because investment in human resources is perhaps the most significant change in the region. (HC)

2311 Smith, A.J. *Public health in China.* British Medical Journal (London), 2, 1 Jun 1974, 492-494. Engl.

A Western doctor cites the schistosomiasis campaign as an example of the important achievements made in China since 1949 in the field of public health. The campaign involved devising a method of destroying the disease vector, an amphibious snail, by burying it beneath the water line; sending a group of barefoot doctors to every commune in the endemic areas to teach the workers about the disease and instruct them in its eradication; and finding and treating persons infected with the disease. By systematically applying these measures, the infection was reduced from 30-40% (1950s) to 4% (1965) in endemic areas. Similarly, kala azar was eradicated by spraying its vector, the sandfly; treating existing cases of the disease; and killing all domestic dogs, which constituted a reservoir of the disease. The author believes that the barefoot doctors are the key to the success of these preventive policies and looks forward to the results of their deployment in screening campaigns. (HC)

2312 Solon, F.S. *Philippine nutrition programme: a government and private effort.* Assignment Children (Geneva), 35, Jul-Sep 1976, 72-79. Engl.

A national nutritional programme has evolved in the Philippines after many years of joint efforts of government and the private sector. The original fight against malnutrition was initiated by the Philippine Association of Nutrition; in 1948 the Institute of Nutrition took responsibility for research and education projects in nutrition. Later, the institute was placed under the jurisdiction of the National Science Development Board and was renamed the Food and Nutrition Research Centre (FNRC). Many of the present policies on nutrition resulted directly from FNRC studies. In 1960, government and private agencies began to work more closely together and they formed a joint council whose mandate was to design a nutrition programme and coordinate its implementation. The object of such a programme was to improve the nutritional status of the population, paying particular attention to the vulnerable groups (infants, preschool children, pregnant and nursing mothers, and schoolchildren). The first step in meeting this objective was to establish a network. At the national level, the network, headed by the nutrition council, took responsibility for planning and for coordinating activities of the regional, provincial, municipal, and *barangay* (village) nutrition committees. At the

local level, teacher-coordinators and *purok* (zone) leaders were enlisted to encourage programmes in health protection, food assistance, food production, nutrition education, and family planning. (AC)

2313 UNICEF, New Delhi. *Special Child Relief: operational manual for supplementary feeding and nutrition therapy.* New Delhi, UNICEF, South-Central Asia Region, 26 Feb 1975. 34p. Engl.

See also entry 2637.

This operational manual, which is continually being revised by UNICEF for the Special Child Relief programme in India, contains statements of principle and guidelines for persons distributing food. The aim is to provide state government officials with a prototype which can be adapted to local circumstances, translated into the local language, and distributed. UNICEF and other agency field staff engaged in the overall programme may also find it useful. Chapters deal with selecting beneficiaries, preparing nutritional supplements, and supervising and coordinating staff and projects at state, district, and peripheral levels. A section on nutrition therapy centres describes a standard kit of drugs available from UNICEF and explains how, after simple training, feeding-site supervisors may dispense drugs for diarrhea, fever, cough, and skin infections. A list of abbreviations, suggestions for health and nutrition education, examples of registration cards and the information to be recorded, and a table for calculating food supplement requirements for pregnant women, lactating mothers, and children up to age 6, are appended. (JT)

2314 University of Dar es Salaam, Dar es Salaam. Tanzania, Ministry of Health. *Child care in Dar es Salaam: maternal and child health clinic is a family clinic all carried under one roof.* Dar es Salaam, Department of Child Health, Faculty of Medicine, University of Dar es Salaam, Sep 1974. 95p. Engl.

Reports on childhood health problems and information on available child health facilities in Tanzania are compiled in this document. The authors comprise medical faculty, postgraduate medical students, and nursing officers specializing in child care at the University of Dar es Salaam. Subjects covered include: child nursing care in Dar es Salaam, the history and functions of the nutrition rehabilitation unit at Muhimbili, maternal and child health clinics in Dar es Salaam, the pattern and causes of childhood hepatosplenomegaly in Tanzania, child care at the district and regional level, analysis of admissions into the neonatal and the acute pediatric wards of Muhimbili, the pattern and causes of low birth weight in Dar es Salaam, childhood malnutrition and the pattern of childhood anaemias in Dar es Salaam, the pattern of neoplasms in children in Tanzania, and maternal and child health organization in Tanzania. Statistical data on the 10 main causes of pediatric admissions and death at Muhimbili Hospital are tabulated and the chain of problems that contribute to child deaths in Tanzania is schematically represented. (HC)

2315 WHO, Brazzaville. *Epidemiological surveillance: report of the Regional Director for the period 1972-1973.* Brazzaville, WHO, 22 Jul 1974. 24p. Engl., Fren.

This study on the epidemiological surveillance centres at Abidjan, Nairobi, and Brazzaville indicated weaknesses in the services and recommended changes to strengthen them. Thirty-six countries were asked to report regularly on morbidity, mortality, and vaccinations to their respective surveillance centres and to allow a team to study their recording and dispatch procedures. Twenty-five countries agreed to participate. During the investigation, it was observed that reporting was slow but improving and that vaccination data were incomplete because immunizations were viewed as a local responsibility. Study recommendations were that national laboratory services standardize techniques, reduce time devoted to technical work, and increase efforts in epidemiology, introducing a better referral system and the compilation of a monthly report. The study underlined that the first priority for the surveillance centres was to compile information received from the national laboratories. Six tables of data are appended. (HC)

2316 WHO, Brazzaville. *Epidemiological surveillance in the African region: policy and strategy for the regional inter-country epidemiological surveillance centres.* Brazzaville, WHO, 1973. 17p. Engl.

The role and function of three epidemiological surveillance centres in Nairobi, Abidjan, and Brazzaville are discussed. The centres' ultimate goal is to aid in reducing the morbidity and mortality caused by communicable diseases in Africa. Five sub-objectives have also been identified: participation in investigations that will provide epidemiological data necessary for programme planning at the country and regional level; compilation, analysis, and interpretation of epidemiological data; dissemination of epidemiological data; participation in the development and improvement of epidemiological services; and participation in the planning and implementation of surveillance and control activities developed within the framework of national and sub-regional programmes. Staffing patterns and data processing equipment of the three centres are outlined and a number of activities related to each of the aforementioned objectives are set down. Each centre will be responsible for a number of countries and close cooperation between centre and national authorities in the form of regular visits, correspondence, and routine contribution of data is anticipated. (HC)

2317 WHO, Geneva. FAO, Rome. *Methodology of nutritional surveillance: report of a joint FAO/WHO expert committee.* Geneva, WHO Technical Report Series No.593, 1976. 66p. Engl.

A joint FAO/WHO committee prepared this report on nutritional surveillance. They defined surveillance objectives, identified indicators, delineated steps for planning surveillance programmes, and suggested areas for future research. According to the committee, nutritional surveillance is a continuous process that should describe the nutritional status of a population, analyze causes of poor nutritional status, urge governments to invest in human development, forecast evolution of nutritional problems, and monitor existing nutrition programmes. Surveillance systems should be based on the principle that findings will produce or modify action directed toward the populations under surveillance. They should draw on indicators of nutritional status, which include growth and body dimensions, sexual development, clinical and biochemical investigations, diet history, demography, mortality, and morbidity. The procedures in surveillance system planning are to evaluate the problem; identify the areas and/or population groups at risk; analyze food supply systems; decide possible interventions; select variables; investigate existing data collection systems; design report format and questionnaires; initiate training, supply operations, supervision and quality control mechanisms; and arrange for data collecting, transit, processing, and analysis. The expert committee recommended that national governments regard surveillance as a priority, launch programmes based on established indicators, utilize existing information channels, invest authority in a central information unit, and provide training for personnel in data collection and processing for the system. Further, the group called on international agencies to establish machinery to coordinate their efforts in information transfer, promote national surveillance systems, prepare reference manuals on surveillance organization and procedures, etc. (AC)

2318 **WHO, Geneva.** *Disposal of community wastewater: report of a WHO expert committee.* Geneva, WHO Technical Report Series No.541, 1974. 72p. Engl.
Also published in French, Russian, and Spanish.

A WHO expert committee reviewed the available methods of human waste disposal; defined priorities for investigation, research, and promotion in environmental sanitation; and recommended activities for national and international agencies to upgrade disposal of community wastewater. The group found that no new techniques in wastewater collection and treatment had evolved since developed countries introduced universal sewerage systems but that existing techniques had been modified somewhat to suit the needs of developing societies. Available techniques include water-carriage; air-carriage; nightsoil, bucket or conservancy; and on-lot disposal systems. Each has its advantages and disadvantages, but thus far aqua privies (on-lot disposal) have proved the most suitable. At present, the cost of any community wastewater disposal system is too high. The reasons are many, but the most important is that local resources have not been sufficiently explored. Committee recommendations, therefore, stress the need to evaluate and utilize local resources. They also call for planners to integrate sanitation with water supply programmes and to introduce predominantly self-financing projects with national and international subsidy. They urge governments to set national targets and encourage all agencies to establish effective organizations for management of facilities and promotion of hygiene. (AC)

2319 **WHO, Geneva.** *Uses of epidemiology in housing programmes and in planning human settlements: report of a WHO Expert Committee on Housing and Health.* Geneva, WHO Technical Report Series No.544, 1974. 64p. Engl. 106 ref's.
See also entry 2109; also published in French, Russian, and Spanish.

A WHO expert committee examined the role of epidemiology in planning and evaluating human environments and published their findings in this monograph. They interpreted the purpose of epidemiology as being the detection of the effects of certain modes of housing on health and they defined the steps toward that purpose as collection and analysis of data. To date, according to the committee, most studies have compared populations either living in different areas or moving to new housing. Both these study populations are difficult to match for controls because of the influence of other elements, such as social class, occupational status, unemployment, poverty, mental capacity, general ability, and social status of parents. Thus, there is a danger in attributing too much to the effects of physical environment; for instance, past studies linking poor health closely with overcrowding have recently lost credibility as persons in high density areas adjusted to their environment. Based on these and other findings, the committee recommended that WHO prepare an annotated bibliography on housing and health, sponsor training programmes and seminars for investigation into the influence of housing on health, work together with other specialized international agencies whose sphere of influence includes housing, convene meetings to research specific environmental issues, incorporate health assessment and monitoring in every housing project, etc. (AC)

2320 **WHO, Geneva.** *Health aspects of environmental pollution control: planning and implementation of national programmes.* Geneva, WHO Technical Report Series No.554, 1974. 57p. Engl.
Also published in French, Russian, and Spanish.

The World Health Organization commissioned a committee of experts to study the health aspects of environmental pollution and to draft some guidelines for planning and implementing control programmes at the national level. The committee discussed the scope of the problem and the trends and approaches for controlling it. They also identified the objectives, priorities, and evaluation of policy formulation; the technical and organizational components of pollution control programmes; constraints; opportunities for educational and research support; and the role of international cooperation. Programme objectives established by the committee are to promote a better quality of life by

reducing pollution to the lowest level possible, to assess possible adverse effects of new or potential pollutants, and to prevent environmental health hazards by controlling the input of pollutants. Committee conclusions and recommendations stressed national and international collaboration; the use of evaluation techniques like risk-benefit, cost-benefit, cost-effectiveness analyses; the importance of testing for chronic toxicity; and the application of preventive measures in environmental pollution. The committee urged WHO to prepare documents on pollution standards and criteria; to set up, coordinate, and strengthen programmes for monitoring pollutants; to provide technical assistance in national programmes; to compile and disseminate scientific and technological information on environmental pollution; etc. (AC)

2321 WHO, Geneva. *Special subject: health aspects of population trends and prospects.* World Health Statistics Report (Geneva), 27(5), 1974, 200-229, Engl., Fren. Refs.

Health, socioeconomic development, and fertility levels form a complex relationship that has been researched a great deal but has not been successfully analyzed. Thus far, the most that can be said is that health care is both a means and an objective of development and a means as well as a short-term obstacle to lower fertility levels. The statistical data that support these statements are profuse; some are set forth as examples in this document. (AC)

2322 Whyte, R.O. *Rural nutrition in monsoon Asia.* Kuala Lumpur, Oxford University Press, 1974, 296p. Engl. Refs.

The author of this book examines nutrition in rural Asia from an ecologist's point of view. He attempts to establish the place that Asians occupy within the ecosystem and to sort out the socioeconomic influences on their food production and practices. He also discusses nutrition disorders and reviews national and international activities to improve prospects. Throughout, he aims to promote an understanding of the land's influence on plans for greater food production and balanced nutrition. He directs special attention to the programmes under way in India and the People's Republic of China and those countries' resources for food. He concludes that a study of human ecology is a priority and that applied plant and animal ecology projects should be directed toward those communities of domestic and wild animals and crops that provide food for humans and feed for their livestock. He believes that accurate figures of the mature and vulnerable populations and their requirements for food are needed and he acknowledges the work of FAO in estimating the food production requirements for 1985. He notes, however, that the calculations were made on the basis of national governments' figures of available food and that these are a very shaky foundation. Appended are case studies of regional diets and a bibliography of more than 600 citations on nutrition. (AC)

2323 Yang, R., Fouda Onana, A., Riedel, D., Ripert, C. *Etude epidemiologique de l'onchocercose dans la vallee de la Sanaga au village de Njore. (Epidemiological study of onchocerciasis in the village of Njore in the Sanaga river valley).* Medecine d'Afrique Noire (Paris), 24(3), Mar 1977, 191-196, Fren.

An epidemiological survey of Njore (Cameroon) reveals that 71% of the inhabitants are afflicted with onchocerciasis, making that village a hyperendemic area. The disease is of an intermediate variety with characteristics of both the forest and the savanna strains. The symptoms of the population are described in terms of onchocerciasis nodules, pigmentation disorders and atrophy of the skin, scabies and other itching, elephantiasis, and other complications affecting the lymph system. A separate section deals with blindness and visual difficulties. Statistical data are included. (RMB)

III. Primary Health Care – Implementation

III.1 Rural Inpatient Care

See also: 2165, 2220, 2273, 2277, 2314, 2359, 2362, 2365, 2387, 2400, 2407, 2423, 2434, 2536, 2651, 2669, 2691, 2697, 2745, 2788

2324 Belcher, D.W. Church Hospital Association of Ghana, Accra. *Church related hospitals in Ghana, 1974: results of CHAG hospital survey.* Accra, Church Hospital Association of Ghana, 12 Sep 1975. 4p. Engl.

In November 1974, to gather data for future activities, the Church Hospital Association of Ghana (CHAG) distributed a questionnaire on hospital characteristics, patient statistics, programmes, staff, fee schedules, and finances to its 32 hospitals. Survey results were reviewed the following August by a workshop comprising church and CHAG representatives, senior officials of the Ministry of Health, and visiting consultants from the Christian Medical Commission. They indicated that overseas contributions for operating costs were diminishing and that hospitals without adequate government funding depended on patient fees as their main source of income. Questions regarding the potential role of CHAG hospitals, means of overcoming staff shortages and meeting recurrent expenses, and anticipated effects of government contributions in terms of staff, finances, and planning resources were raised. Tabulated data based on forms from 27 CHAG hospitals are included. (HC)

2325 Bryden, I., Lewis, J.S., Mbatha, C., Morrell, D.F., Morrell, M., Pyle, A., Schweitzer, G.J., Linden, R.H. van der, Ueckerman, J. *Three-year survey of a rural orthopaedic clinic.* South African Medical Journal (Cape Town), 49(16), 12 Apr 1975, 677-678. Engl.

The rural orthopaedic clinic at Kokstad, Republic of South Africa, has been operating for 3 years; it functions as an orthopaedic referral centre for neighbouring health facilities, initiates research projects, and represents a model of teamwork. The team consists of an orthopaedic surgeon who visits the clinic twice monthly, the resident medical superintendent and the local general practitioners, staff nurses, and two physiotherapists. Between the surgeon's visits, the local general practitioners and the medical superintendent deal with emergencies and assist at operations, giving anaesthetics, attending to pre- and post-operative care, etc.; through practice they can handle all but major operations, which are reserved for the surgeon. The clinic team is assisted in patient follow-up by two members of an organization called Cripple Care. (HC)

2326 Courtejoie, J., Rotsart de Hertaing, I. Bureau d'Etudes et de Recherches pour la Promotion de la Sante, Kangu-Mayumbe, Zaire. *Hopital rural: pour une orientation nouvelle des hopitaux vers le progres de la sante. 2 edition. (Rural hospital: for a new hospital orientation towards health progress. 2 edition).* Kangu-Mayumbe, Bureau d'Etudes et de Recherches pour la Promotion de la Sante, Brochure Illustre No.1, n.d. 31p. Fren. 9 refs.

See also entries 2386, 2590, and 2591.

The contribution of the rural hospital in Zaire to the health needs of the people it serves is the topic of this illustrated health education brochure. The problems that have traditionally made it difficult for the hospital to provide adequate care are the emphasis on curative rather than preventive medicine and the distance between most health care facilities and their prospective patients. Hospitals could change their outmoded orientation by concentrating on global, community, and planned needs. This in turn would require changes in the attitudes of health professionals and auxiliaries and the population itself. Some means for implementing these changes are suggested. (RMB)

2327 Critchley, J., ed(s). *Surgery in China: part two.* Medical Journal of Australia (Sydney), 1(23), 7 Jun 1975, 722-725. Engl.

See also entry 2328.

A group of Australian physicians who visited the People's Republic of China discuss Chinese approaches to cardiothoracic surgery, general surgery, ophthalmology, and medical education. They note that acupuncture anaesthesia is used for every type of operation, including open-heart surgery, although cardiac procedures are rarely performed due to a lack of modern equipment and because of moral convictions that forbid transplants. They also comment that lung cancer is the third most common carcinoma in China, but there is no effort to discourage smoking. Other observations are that the Chinese treatments combine Western and traditional medicine whenever possible and that Chinese physicians refuse to conduct clinical experiments that would deprive control patients of treatment that might help them. In the field of medical education,

courses have been shortened from 6 to 3 years during which theory and practice are combined. Students spend 4 hours a day in class, 4 hours doing practical work, and additional time studying at night. This routine is followed 6 days a week with an annual 2-week vacation. Graduates are assigned to positions according to the needs of the state and they may undertake postgraduate training as apprentices. Junior doctors are promoted on the recommendation of their physician colleagues. (RMB)

2328 Critchley, J., ed(s). *Surgery in China: part one.* Medical Journal of Australia (Sydney), 1(22), 31 May 1975, 693-697. Engl.
See also entry 2327.

In 1973, a group of nine Australian surgeons toured the People's Republic of China to establish friendly relations with colleagues, exchange medical knowledge and experiences, and arrange for further interchange of information and personnel. Members of this group comment on acupuncture, orthopaedic surgery, obstetrics and gynaecology, vascular surgery, dialysis and transplantation, and the treatment of major burns. One of the techniques they discuss is the treatment of malignant neoplasms by amputation and reimplantation after removal of the tumour; for example, in one patient the elbow was reimplanted at the shoulder after a bone carcinoma of the humerus was excised and the result was a functional hand. The authors note that obstetricians and gynaecologists, predominantly female, rely almost entirely on acupuncture for analgesia during childbirth and surgical procedures; they also comment that autopsies are rarely performed in China for any reason. Vascular epidemiology is somewhat different from that of Australia, with an increased incidence of aortitis and fewer cases of diabetes and, due to a lack of equipment and cultural bias against organ donation, kidney dialysis and transplants are rare and little studied. Another finding was that burn treatment is innovative and relatively successful – the 33% survival rate of patients who have suffered third degree burns over more than 50% of their bodies is superior to the rates achieved in Australian burn units. (RMB)

2329 Fehrsen, G.S. *Communicating the concept of nutritional disease in a rural area.* South African Medical Journal (Cape Town), 48(60), 11 Dec 1974, 2521-2522. Engl.
Biennial Meeting of the South African Nutrition Society, Pretoria, South Africa, 6-8 Sep 1973.

To emphasize the causal relationship between diet and disease, especially scurvy, the staff of Mount Ayliff Hospital (South Africa) withheld vitamin injections from their Xhosa patients and relied entirely upon natural food supplements. The patients initially resisted the treatment but reconsidered as their conditions rapidly improved. In fact, many became enthusiastic promoters of nutrition in their own communities. The hospital no longer admits patients with nutritional disorders but refers them instead to a nutrition rehabilitation unit. (RMB)

2330 Glittenberg, J. *Adapting health care to a cultural setting.* American Journal of Nursing (New York), 74(12), Dec 1974, 2218-2221. Engl.

A nurse visiting the Behrhorst Hospital in Chimaltenango, Guatemala, describes how modern medicine has been adapted to fit the needs expressed by the people. The hospital's structure resembles as closely as possible the patients' homes, families cook and care for their sick while they are in the hospital, and Mayan women are employed as nurses. Health workers explain treatment in terms of indigenous beliefs and sometimes make allowances for traditional cures. Key positions on the staff are gradually being filled by the Guatemalans and Guatemalan medical students have begun interning there. An indication of the success of this approach is the fact that the hospital sees patients at the rate of 200 per day, whereas a nearby state hospital with beds for 100 may serve only 6. (HC)

2331 Hopital de Kangu-Mayumbe, Kangu-Mayumbe, Zaire. *Rapport d'activite 1973 de l'hopital de Kangu-Mayumbe. (Report on the activities of Kangu-Mayumbe Hospital in 1973).* Kangu-Mayumbe, Zaire, Hopital de Kangu-Mayumbe, 1973, 14p. Fren.

Kangu-Mayumbe is a 480-bed rural hospital in Zaire. Its staff consists of 3 doctors, 21 nurses, 52 student nurses, and 10 miscellaneous workers. During 1973, 15 297 cases were treated, 8 605 patients were hospitalized, and 95 105 were seen at the dispensary. The reasons for hospitalization were infectious and parasitic diseases (5 642 cases), birth and postpartum complications (2 772 cases), conditions requiring surgical intervention (2 002 cases), genitourinary tract diseases (1 020 cases), respiratory tract ailments (871 cases), etc. The main causes of child mortality were smallpox, whooping cough, bronchopneumonia, and anaemia. Because most of the diseases treated in hospital were preventable, the following extramural activities are priorities for the future: vaccination (especially against smallpox), malaria prophylaxis, periodic de-worming campaigns, early discovery and treatment of pulmonary and digestive diseases, and the introduction of health education along with preschool programmes. Documents on preventive medicine and health education produced by the hospital in 1973 are listed. (HC)

2332 International Hospital Federation, London. *Nineteenth International Hospital Congress.* World Hospitals (Oxford), 12(1), Jan 1976, 1-102. Engl.
Nineteenth International Hospital Congress, Zagreb, Yugoslavia, 15-20 Jun 1975.

Forty-seven countries sent delegates to the 19th International Hospital Congress to participate in sessions on integrated health services, computer applications in health care, psychiatry and architecture, planning and construction of health facilities, and controlling health care costs. Speakers hailed from Yugoslavia, the UK, the USA, France, and Canada. The papers and discussions arising from the congress are presented in this publication, although the contributions to the session

on computer applications have been published elsewhere. (AC)

2333 Kaplan, S.J. *Educacion para la salud: resultados de experiencia interdisciplinaria. (Health education: results of interdisciplinary experience).* Boletin Medico del Hospital Infantil de Mexico (Mexico). 31(4). Jul-Aug 1974. 851-857. Span.

Team treatment at the Ramon Sarda Municipal Hospital for Maternal and Child Health, Mexico, began in 1971 through the efforts of the pediatrics department. A psychologist and a social worker were incorporated to monitor health records and to cooperate with the pediatrician for those children who could benefit from a more integrated approach. The team organized group discussions for mothers to alleviate their fears and these discussions indicated the need for a gynaecologist on the team. Thus, the department of gynaecology was integrated into the programme. The author comments that the experience (2 years and 2 months) has benefited both staff and patients, despite the organizational, administrative, and personal effort involved in its implementation. (HC)

2334 Nyst, J.M. *Bushdokter in Kenya.* Utrecht. Uitgevery Ons Huis. n.d. 176p. Dutch.

A Dutch physician describes a 3-year stay (1971-1973) in Misikhoe in the Western Province of Kenya during which he practiced in the St. Charles Lwanga Hospital. He was the first physician in residence at the mission-operated hospital, which served some 160 000 people covering 600 square miles. Before he joined it, the hospital had no running water, electricity, or laboratory; food was provided by patients' relatives; and the staff comprised only a nurse, a midwife, and a secretary. He found that the most frequently occurring health problems were largely preventable through health education. They included malaria, kwashiorkor, tuberculosis, anaemia, dehydration, and infections due to trauma. Under his direction, therefore, the hospital staff undertook health education, preventive measures, and treatment, working persistently, for example, to show that kwashiorkor was not an incurable illness. At times, he treated patients who had consulted witchdoctors and received harmful treatment. Thus, he recognized the need for better communications with medicine men and magicians. He also realized the importance of understanding the language, culture, and habits of the population and he studied and reported on the three main tribes in the district. During his stay, the hospital expanded to include a maternity ward with laboratory, a dormitory and dining room for student nurses, staff quarters, a rainwater collection system, and latrines; also the number of outpatients doubled, staff increased, and visits were made by a trained nurse to villages within 25 km of the hospital. His account includes many photographs and a list of traditional medicines is added. (EE)

2335 Papua New Guinea. Department of Public Health. *Standard treatments for common illnesses of children in Papua New Guinea.* Port Moresby. Department of Public Health. n.d. 48p. Engl. 8 refs.

This pocket-sized manual, the result of a pediatric workshop held in Goroka (Papua New Guinea) in 1974, has been written to provide busy nurses, health extension officers, and doctors with simple, safe, and effective protocol for treating common illnesses of childhood. Prescriptions are given for 19 health problems, including pertussis, anaemia, malnutrition, low birth weight, and accidental poisoning. Some entries also set forth distinguishing features of the disease, other investigations necessary, and explanations for parents, as well as advice for nursing treatment and the precautions to be taken when using certain drugs. (JT)

2336 River Zaire Baptist Community. Pimu. *Pimu Hospital, Equator Province: annual report 1973.* Pimu, Zaire. River Zaire Baptist Community. Pimu Hospital. 1973. 5p. Engl., Fren. Unpublished document.

Pimu Hospital, a 148-bed facility serving a rural population of 100 000 in Equator Province, Zaire, reports that 34 new students have been accepted in the nurse auxiliary training course; a mobile clinic has held 450 **antenatal and 450 infant consultations each month; 1 022 smallpox, 683 tuberculosis, 224 poliomyelitis, and** 18 DPT (diphtheria, whooping cough, and tetanus) immunizations were given; 40 expectant mothers were immunized against tetanus in the newborn; the hospital's caseload consisted of 5 081 outpatients and 1 710 inpatients, who required 197 major operations, 320 minor operations, 364 normal deliveries, and 67 complicated deliveries; a high incidence (500 cases) of amoebic dysentery was noted; leprosy diagnosis in the hospital improved and the staff planned to upgrade the facilities in the local leprosy village, distribute drugs, and extend the search for new cases in the near future. Additional information on staff changes, building construction and maintenance, and the hospital's finances is included. (HC)

2337 Rodrigo, J.N. *Suggestions for the management of obstetric emergencies in a non-specialist rural hospital in Sri Lanka.* Ceylon Medical Journal (Colombo). 19(1). Mar-Jun 1974. 3-11. Engl.

An obstetrician with 15 years experience in Sri Lanka's remote hospitals provides a checklist for inexperienced medical officers posted to rural hospitals. He describes necessary drugs and equipment and explains procedures for managing perineal and cervical tears, abortions, antenatal and postpartum haemorrhage, retained placenta, difficult labour, and eclampsia. He also delineates the antenatal signs that indicate a patient's need to be moved to a better-equipped facility for labour and sets forth general rules for decision-making. Some of the instructions are accompanied by case reports. (HC)

III.2 Rural Outpatient Care

See also: 2158, 2181, 2189, 2223, 2255, 2257, 2273, 2299, 2325, 2329, 2335, 2336, 2453, 2474, 2509, 2513.

2536, 2538, 2584.2595, 2608, 2617, 2667, 2669, 2671, 2673, 2689, 2691, 2692, 2701, 2795

2338 Allwood, C.W. *Community medical service using two-way radio: making a little doctor go a long way.* South African Medical Journal (Cape Town), 48(46), 21 Sep 1974, 1957-1958, Engl.

In 1970, an isolated South African hospital serving a rural population of 30 000 installed a radio communications system at a cost of approximately US $3 250; the system's purpose was to overcome local transportation difficulties and expand the services offered at a hospital in the area. Mobile health units operated by nurses were linked to the hospital and nurses were able to receive advice over the radio. Two neighbouring hospitals adopted similar systems and coordinated their services to provide 24-hour coverage as well as clinical consultations and discussions. The author concludes that the use of the radio has greatly increased the effectiveness of these lowland hospitals' available services, although it might not be as successful in a mountainous area. (RMB)

2339 Arnon, A. Health Centre, Nehora, Israel. *Comprehensive family medicine in a rural area.* Australian Family Physician (Victoria), 2(4), 1973, 256-258, Engl.
Fifth World Conference on General Practice, Melbourne, Australia, Oct 1972.

The functions of a health centre giving comprehensive medical care in a rural area in the south of Israel (Nehora) are described and graphically illustrated. These activities include mother and child care, medical care for schoolchildren, health education, nutrition education, sanitation, and prevention and cure of epidemic diseases. Routine activities include general inoculation against tetanus, screening of the population for pulmonary diseases, immunization against children's diseases such as measles, and screening for amoebiasis. The nurse at the centre is a fully qualified hospital nurse who also acts as school nurse; the field nurses, who are responsible for the health standard in their respective villages, have usually obtained a diploma in public health. They attend staff meetings once a week with the personnel at the centre. The variety of services offered by the health centre facilitates the provision of coordinated preventive and curative medical care. (EE)

2340 Bactat, J.L. *Health care delivery: the expanding role of the community health nurse.* Philippine Journal of Nursing (Manila), 44(3), Jul-Sep 1975, 166-172, Engl.

In the Philippines, intensive rural health projects have been under way since the 1950s; recent developments attempt to coordinate earlier programmes and exploit their strengths and eliminate their weaknesses. One programme is compulsory rural practice as a prelicensure requirement for medical and nursing graduates. Another is the employment of village leaders as village health workers. Others include retraining programmes for community health nurses, midwives, public health nurses, and sanitary inspectors. All these workers have been incorporated into a network of primary, secondary, and tertiary level care, with the community health nurse being the primary health care worker. (AC)

2341 Brull, P. Kupat Holim, Tel Aviv. *Hashirut hapsychiatri hamirpati bekupat-holim. (Ambulatory psychiatric services in Kupat Holim).* Family Physician (Tel Aviv), 1(3), 1971, 66-70, Hebrew.

The author stresses the importance of outpatient services in the treatment of patients with psychiatric illness; examples of the effectiveness of this approach are already found within the existing framework of the general health services provided by the sick fund. When a day-hospital is attached to the ambulatory service it also greatly contributes to a decrease in hospitalization. In general, ambulatory services have become better prepared to deal with psychiatric disturbances because educational programmes for medical students, psychologists, and social workers have focused on mental health. The author maintains that in a properly organized psychiatric ambulatory service much can be done to improve preventive and community health work. (ES)

2342 Cole-King, S.M. *Under-fives clinic in Malawi: the development of a national programme.* Journal of Tropical Pediatries and Environmental Child Health (Kampala), 21(4), Aug 1975, 183-191, Engl. 24 refs.

In the late 1960s, the government of Malawi instituted a programme aimed at reaching 60% of children under age 5 within 10 years. The programme was to be implemented through all existing basic health services and supplemented, where necessary, by mobile clinics. It was to offer growth monitoring by means of a parent-retained growth chart; immunization against pertussis, TB, and smallpox; and nutrition education. The government was assisted by 30 Peace Corps volunteers who helped to start child health clinics and, between 1968 and 1972, the number of clinics increased from 73 to 362. The number of attenders rose from 17% to 40-50% of the population under age 5, the number of children being immunized increased dramatically, and the number of attenders classified as underweight fell from 37% to 29%. The cost of the programme was roughly assessed at $0.13 (U.S.) per patient-visit. From the programme's results, it is concluded that the aim is feasible and that basic services can be brought to large numbers of children at low cost and considerable benefit. (HC)

2343 Coordinating Agency for Health Planning, New Delhi. *Starting an under fives clinic.* New Delhi, Coordinating Agency for Health Planning, CAHP No.213, Mar 1974, 12p, Engl.

The aims, features, and advantages of under-fives' clinics are explained and the steps involved in setting one up are outlined. These include choosing a suitable location and building, hiring staff, and obtaining equipment. The functions of the various staff members (professional and auxiliary) are outlined and the equipment, supplies, and teaching materials available from the Coordinating Agency for Health Planning, New Delhi, are listed according to their use (immunization, treatment, health education, etc.), costs, and relative importance. Finally, names and addresses of existing under-fives' clinics in India are listed. (HC)

2344 **Cronberg, S.** *Sjukdomspanorama och infektionssjukvard i Dakar, Senegal. (Range and treatment of infectious diseases at Dakar, Senegal).* Lakartidningen (Stockholm), 73(43), 20 Oct 1976, 3666-3668. Swedish.

The author reports on the infectious diseases presenting at the Clinic of Infectious Diseases, Dakar University Hospital, in Senegal. Complications of measles, malaria, and gastroenteritis were the leading disorders, followed by purulent meningitis, tetanus, pneumonia, diphtheria, and typhoid fever. Tuberculosis and poliomyelitis were also frequent. Diagnosis and treatment are discussed. (Journal abstract.)

2345 **Dagoni-Weinberg, A.** Kupat Holim, Tel Aviv. *Shirut psychologi tzamut letachanat em-ve-jeled. (Psychological service attached to an infant welfare clinic).* Family Physician (Tel Aviv), 1(3), 1971, 118-120. Hebrew.

A sociopsychological service for infants has been established to treat problems of feeding, cleanliness, sleep, speech, and emotional stability. The service was initiated in an infant welfare clinic in a low-income, densely populated urban area in Israel and it has aimed at community treatment by guiding parents, nurses, and nursery school teachers in a common direction. The project has underlined the need for such a service to ensure the optimal development of underprivileged children. The results have been encouraging and represent the first step toward a community health service for infants. (EE)

2346 **Dror, K.** *Health and welfare services for agricultural workers in Israel.* Tel Aviv, Tel Aviv University, Medical School and Center of Occupational Safety, Hygiene, and Health, Sep 1975. 5p. Engl.

Sixth International Congress of Rural Medicine, Cambridge, UK, 21-27 Sep 1975.

Hired farmhands, members of collective settlements, and farmers, who represent about 15% of Israel's working population, are automatically included in all the national insurance laws, although sickness insurance is voluntary. Since 1973, the law has required that employers contribute to their workers' voluntary sickness insurance and that the health insurance institutions provide occupational health services for all employees whether their employees are insured or not. Medical services are organized so that every settlement has a village clinic served by a part-time nurse and a visiting physician. Of some 1 123 clinics in the country, about 700 are in rural or semi-rural settlements. In addition, there are advisory and central dispensaries that provide specialty consultations and in several rural areas health centres, staffed by a general practitioner and at least two nurses, have been set up to serve an average of six villages. Government and four sick-fund hospitals are serving outlying rural districts, while all the central and university hospitals are open to both the urban and rural populations. One health centre nurse, who has had public health training, visits all the villages regularly to oversee preventive health services, which are provided by the Ministry of Health and the sick funds. A voluntary farm workers' insurance fund, which covers sickness benefits up to 10 months, old age pensions, general disability benefits, vacation pay, recreation benefits, life insurance, and survivors' benefits, provides a form of added health security. Toward this insurance the farmworker contributes 4% of his pay; the employer an additional 18.6%. (EE)

2347 **Fernandez Sacasas, J.A., Alvarez Batard, G., Diaz Novas, J., Ruiz Leon, W., Rodriguez Mesa, N., Hernandez Rodriguez, P.** ***Programa integral de salud para el adulto segun el modelo de medicina en la comunidad. (Integrated health programme for adults according to the community medicine model).*** Revista Cubana de Administracion de Salud (Havana), 1(3-4), Jul-Dec 1975, 156-173. Span. 25 refs.

In 1974, the Alamar teaching clinic in Havana (Cuba) initiated a community medicine programme for adults. The objectives of the programme are outlined in detail; general objectives included reducing the mortality and morbidity of community residents above age 15, making contact with families and neighbourhood organizations, combining clinical and epidemiological techniques, and promoting preventive medicine. The results of an evaluation of the programme, which reached 47% of the target population, are presented as statistical data. The authors conclude that the adult programme is feasible within the framework of community medicine, helps the health team ascertain community needs and their own role in the community, provides learning opportunities and practical experience for medical students, stimulates related research, and fulfills its objectives. (RMB)

2348 **Institute of Child Health, Niloufer Hospital, Hyderabad. Coordinating Agency for Health Planning, New Delhi.** *Health care of children under five.* Bombay, Tata McGraw-Hill , 1973. 98p. Engl. 38 refs.

Niloufer Hospital Workshop on Health Care of Children Under Five, Hyderabad, India, 6 Oct 1972.

This booklet explains the procedures for setting up an under-fives' clinic in India. The various chapters cover the philosophy, history, and objectives of under-fives' clinics; the physical organization of an under-fives'

clinic; job descriptions for the various staff; function and samples of weight charts; nutrition education, supplementation, and rehabilitation; infectious diseases and immunization; family welfare and the under-fives' clinic as an occasion for the promotion of birth spacing; evaluation and research; instructions for consultation and standing orders for treatment of the 10 most common diseases found in children in southern India; and considerations peculiar to child health care in the subcentres (referral, training auxiliaries, home visiting, etc.). Floor plans, weight charts, and various pieces of clinic equipment are illustrated and a list of medicines and pediatric dosages is included. (HC)

2349 **Karp-Giora, S.** Kupat Holim, Tel Aviv. *Taplitmercaz letipul iomi leiladim. (Medical day care centre for infants).* Family Physician (Tel Aviv), 3(3), 1974, 397-401. Hebrew.
Abstracts in English, French, and Russian.

An evaluation of 100 selected infants aged 1 week to 1 year who were treated at a medical daycare centre during the years 1962 to 1972 is reported. The duration of treatment varied from 1 to 42 weeks. The centre serves a population of 1 000 lower socioeconomic class families with about 250 children up to age 1 year. The major problems encountered are: anxiety, insecurity, or ignorance in the handling of firstborn children; malnutrition, feeding, or behaviour problems; gastroenteritis and dehydration; emotional disturbances; and family crises. Care is provided by staff using demonstration techniques and involving the mother actively. (Modified author abstract.)

2350 **Kilsdonk, R.** *Travelling clinics bring care to Cardston.* Canadian Hospital (Toronto), 43, May 1966, 39-40. Engl.

Traveling medical clinics bring free pediatric care to people living in remote areas of Canada's western provinces. Staffed by two specialists, a social worker, a dietician, two district health nurses, three staff nurses, and an interpreter, each clinic provides consultation and diagnosis for patients previously identified by local doctors as suffering from such crippling childhood diseases as tuberculosis and poliomyelitis. The Easter Seals section of the Alberta Council for Crippled Children and the Oil Services Charitable Organization sponsor and organize the clinics, recruit and pay the medical personnel, and assume the necessary costs involved when a patient must be sent to the city hospitals for major surgery or continuing treatment. (ES)

2351 **Maddocks, I., Maddocks, D.L.** *Health and health resources in a Papuan village.* In Davies, A.M., Uses of Epidemiology in Planning Health Services. Belgrade, Savremena Administracija, 1973, 14-26. Engl. 13 refs.
Sixth International Scientific Meeting of the International Epidemiological Association, Primosten, Yugoslavia, 29 Aug-3 Sep 1971.

From March 1969 to December 1970, a physician, a nurse, and a nursing auxiliary operated an evening and emergency clinic in the Melanesian village of Pari, Papua New Guinea. During this time, they studied village epidemiology and demography and clinic attendance patterns; statistical data on their findings are presented. Included are additional data on training levels and responsibilities of nurses and auxiliary health workers and the cost of primary and secondary health care in the community. As a result of this study, the authors suggest that the basic facility of primary health care should be the community clinic, serving a population of 5 000-10 000. They add that paramedical workers are necessary to save professionals for more sophisticated roles in health care. After discussing cultural attitudes and aspects, the authors conclude that the Pari villagers regard medicine as a personal service, and if health care delivery does not emphasize this personal element, the villagers will avoid and even fear health services and personnel. For this reason, the authors recommend that the responsibility for primary care in Pari be given to a locally trained nurse. (EE)

2352 **Matovu, H., Bennett, F.J., Namboze, J.** *Kasangati Health Centre: a community approach.* In Gould, G.C., ed., Health and Disease in Africa: the Community Approach, Nairobi, East African Literature Bureau, 1971, 17-32. Engl. 53 refs.
Seventeenth Annual Scientific Conference of the East African Medical Research Council, Nairobi, Kenya, 1970.
See also entry 315 (volume 1) and entry 2753 for complete proceedings.

In 1959, the Makerere Medical School (Uganda) founded the Kasangati Health Centre as a training centre for medical students. Through the health centre, students and a staff of 27 auxiliaries provide 12 000 villagers with basic health services, including maternal and child health, environmental sanitation, health education, home visiting, public health nursing, and the collection of vital and epidemiological statistics. Recently, services were expanded to include geriatrics, chronic care, mental health, nutrition, and family planning. Patients from outside the Kasangati area are also treated, but medical records are not maintained for them. Included are tables compiled from statistics on morbidity, mortality, birthrate, infant mortality, parasitism, tuberculosis, maternity cases, attendance at family planning and young child clinics, immunization, etc. The implications of these statistics are discussed, as well as some of the problems unique to the area, such as school health and the need for a circumcision clinic. The centre's emphasis on health education and preventive medicine has elicited a strong public response and resulted in a dramatic reduction in general mortality and infant mortality, although diagnosis of indeterminate conditions, more complete data collection, and malaria control still need to be perfected. The authors recommend that priority be given to the establishment of outpatient clinics for family planning. (RMB)

2353 **Morley, D.** *Health and weight chart for use in developing countries.* Tropical and Geographical Medicine (Haarlem), 20(1), Mar 1968, 101-107. Engl.

After 8 years use in Nigeria and other parts of West Africa, the health and weight chart developed by the author has proved to be more than a preventive measure against protein-calorie deficiency; its special features, including a calendar to link weight and age, a graphic medical history with nutrition status and immunizations, and a section alerting staff of "at-risk" factors, make it especially useful as a tool for total care and referral. It creates a positive objective for health staff and parents in ensuring a child maintains an adequate growth rate and offers at least two more benefits. Because the chart is kept by the mother, it instills in her an added sense of responsibility concerning the child's health and sets up a means for evaluating the clinic's effectiveness; a quick check through a village indicates whether children are attending a clinic and how up to date their records are. (AC)

2354 **Purisman, L., Schneider, M.** Kupat Holim, Tel Aviv. *Avodat tzevet, irgunah vehafalatah bemarpa'ah ezorit. (Organization of teamwork and its application in a rural district family health clinic).* Tel Aviv, General Federation of Labour, Kupat Holim, Dec 1973. 70p. Hebrew.

Increased teamwork and a lighter workload for physicians in an Israeli health centre that serves a rural population of about 9 500 were the aims of a staff reorganization. Five primary medical teams were formed; each consisted of one doctor and one nurse. Their work was shared and coordinated effectively. Regular team conferences were held and nurses increasingly accepted responsibility for preventive health care, counseling patients and their families. The role of the nurse in teamwork is most important and nurses should be educated toward this role. Patients' reactions were favourable and administrative services to patients improved. The report includes tables that detail the functions of the clinic under the new system. (EE)

2355 **Qureshi, S.** *Role of social obstetrics in the inter disciplinary approach towards rural health care.* Indian Journal of Preventive and Social Medicine (Varanasi, India), 3, Mar 1972, 14-17. Engl.

In 1970, the multidisciplinary Department of Obstetrics, Pediatrics and Social and Preventive Medicine, Osmania Medical College, India, launched a "social obstetrics" programme at Shankerpally, a village 26 miles from Hyderabad. A preliminary survey revealed that the nutritional status of pregnant women was low, low birth-weight newborns were common, neonatal tetanus was responsible for 27% of the infant mortality, and 90% of all births were attended by untrained dais. On the basis of these findings, services were established offering antenatal, postnatal, gynaecological, and nutritional care. All pregnant women were registered and called to the services for regular antenatal checkups, given iron and folic acid supplements, and immunized against tetanus; other women were encouraged to use cancer screening, family planning, and other gynaecological services. Forty dais were recruited for training in antiseptic techniques and offered remuneration for reporting births. The programme successfully suppressed tetanus neonatorum, increased the number of deliveries conducted in the health centre, improved reporting of births, and engendered more positive attitudes toward family planning. (HC)

2356 **Rigol Rocardo, O., Escalona Reguera, M., Puntonet Ramirez, F., Santiesteban Alba, S., Ferrer Nicolas, R.D.** *Ginecobstetricia en la comunidad: informe preliminar: analisis del primer semestre de 1975 del policlinico docente "Alamar." (Community gynaecology and obstetrics: preliminary report: analysis of statistics from the Alamar teaching clinic for the first half of 1975).* Revista Cubana de Obstetricia y Ginecologia (Havana), 2, Jul-Sep 1976, 221-231. Span.

Late in 1974, the Alamar teaching clinic in Havana (Cuba) initiated an integrated medical programme for women as part of a new, model programme of community medicine. Within the women's programme, each sector of 2 000 women aged 15 or over has access to the services of a general physician, a specialist in obstetrics and gynaecology, and a first-year resident; the authors list the general and specialized services that these doctors are expected to provide. Statistics on the operation of the women's programme during the first 6 months of 1975 are presented and discussed; topics covered include registration of expectant mothers, births and miscarriages, prenatal care, home visiting, at-risk pregnancies, intensive care, registration of births according to place of birth, postpartum care, attendance at prenatal classes, birth complications, registration of contraceptive acceptors, gynaecological problems, cancer examinations, and gynaecological morbidity. The authors conclude that the new women's programme is highly effective, because statistics show a reduction in the number of miscarriages and stillbirths among the target population, an increase in the number of hospital deliveries, and increased use of the gynaecological services with fewer hospital admissions for acute gynaecological problems. (RMB)

2357 **Sich, D., Kim, I.S., Kim, Y.K., Yang, J.M.** *Health post project: an approach to improve health care delivery at the grass-roots in rural Korea.* Yonsei Medical Journal (Seoul), 16(1), 1975, 50-60. Engl. 13 refs.

A Korean health post project provides a model for the integration and delivery of curative and preventive health care on the community level. Located in a rural area of 14 000 people, the project has significantly expanded the activities of the township health centre. It is based on a system by which the community selects a woman for training as a family health worker. She receives 3 weeks training in health theory and practice, which focuses on maternal child health, TB care, family planning, and record keeping. Training emphasizes the worker's responsibility for collecting vital statistics and

identifying and treating patients. The worker's duties include bimonthly home visits to every village household, weekly consultations in her home, and weekly consultations at the health post. She is provided with guidance and supervision from the health centre staff, who have undertaken special training as a result of the project. Further development and implementation of a record system and evaluation framework will complete the project's evolution toward a viable, community-based health care system. (ES)

2358 **Stephens, A.J.** *Impact of health care and nutritional education on an urban community in Zambia through the under five clinics.* Journal of Tropical Medicine and Hygiene (London), 78(5), May 1975, 97-105. Engl.

To measure the impact of under-fives' clinics on juvenile kwashiorkor, the social backgrounds of 60 surviving kwashiorkor patients in Ndola (Zambia) were compared to those of a control group of 60 children with no overt signs of nutritional deficiency. The factors investigated included family status, socioeconomic conditions, feeding habits, and number of visits to under-fives' clinics. Results showed that kwashiorkor victims tended to be the children of single or unmarried mothers of low-income families who had been in the city for less than a year, to have been taken off the breast at an earlier age (an average of 9 months as compared to 18 for the control group), and to be generally neglected and underfed, often receiving foods of no nutritional value, such as Fanta or Coca Cola, in place of milk. However, despite the availability of under-fives' clinics in Ndola, there was no difference in the number of visits paid to them by the two groups. Since many mothers who could have used under-fives' clinics preferred other facilities that would treat older children as well, the author recommends that under-fives' clinics be replaced by "at-risk" clinics for children of all ages within the framework of community health centres. (RMB)

2359 **Swedish International Development Authority, Stockholm.** *Co-operation in the field of health and nutrition between the governments of Sweden and Tanzania.* Stockholm, SIDA, Health and Nutrition Unit, 3 May 1974. 3p. Engl.

In May 1973, Sweden and Tanzania formed an agreement through which Swedish financial and consultant support could be used for the development of Tanzanian rural health services during the period 1972/73-1976/77. The agreement stipulated that Sweden would provide: 90% of the capital costs of 90 rural health centres; courses, seminars, and textbooks for the training of personnel from health centres and health stations; tests of communications equipment adapted for service at health centres; personnel (one health economist, one health planner-physician, and two planning assistants) to serve in the planning unit within the Tanzanian Ministry of Health; eight qualified physicians for services at district and regional hospitals; short-term consultant services to the Ministry of Health; one Swedish occupational health physician; an evaluation of a Swedish-supported mass health education campaign; and support for a national nutrition campaign. Some background information on each item is given and the cost of each in Swedish currency is set forth. (HC)

2360 **Taylor, H.C. Jr., Rosenfield, A.G.** *Family planning program based on maternal and child health services.* American Journal of Obstetrics and Gynecology (St. Louis), 120(6), 15 Nov 1974, 733-745. Engl. 18 refs.
Ninety-seventh Annual Meeting of the American Gynecological Society, Hot Springs, Va., 23-25 May 1974.

In 1970, the Population Council (USA) initiated six clinical projects combining family planning promotion with maternal child health in Indonesia, the Philippines, Turkey, Brazil, Egypt, and Bangladesh. These projects offer integrated family planning and maternal child health services to pregnant women and mothers with children under 2 years. Midwives visit the target populations and stress antenatal and postpartum care and family planning. Most of the actual deliveries are conducted in the home by traditional birth attendants, who refer only complicated cases to the clinics. The authors examine the development of the programme, the costs, the facilities and personnel available, and the individual clinics and projects, although they feel that it is still too early to evaluate the results. The article closes with a discussion of the projects and recommendations by four other American physicians. (RMB)

2361 **Vogel, L.C., Swinkels, W., Sjoerdsma, A., W'Oigo, H.O., Hyndman, G.** *Operational study of the outpatient department at the government hospital at Kiambu, Kenya.* East African Medical Journal (Nairobi), 53(3), Mar 1976, 168-186. Engl.

An operational study of an outpatient department in Kiambu, Kenya, revealed that innovations in drug packaging, staff utilization and location, and department layout improved patient flow and reduced the length of queues but increased the department's dependency on optimal staffing patterns. The study was undertaken in three stages in October 1973 and in March and October 1974. During the three investigations, the operations of the department were observed from Monday to Friday, 7:30 to 17:00 h. Patients were given record cards that identified them as reattendants or new patients and, as they went through the department, their time, treatment, diagnosis, etc., were recorded on the card. Parameters that were measured were queue length at the injection room, pharmacy, dressing room, and the medical assistant's office; rates at which patients arrived at the stations and were treated; waiting time; total numbers of patients and treatments and their costs; quality of care provided in terms of correct diagnosis and adequate treatment; and satisfaction of patients. Between the first and second stages of the study, the department was relocated in a new building that was constructed with movable wall

partitions to allow easy modifications. Study findings were that building modifications along with prepackaging drugs cut down waiting time and queue length. even though workload increased. (AC)

2362 **Welzcer, H.** Israel, Ministry of Health. *Mercaz habriut Bakah Al-Garbiah doch al peulot mercaz habriut beshanim 1972-1974. (Bakah Al-Garbiah Medical Centre: report on the activities of the centre 1972-1974).* Hedera, Ministry of Health, District Office, May 1976. 26p. Hebrew.

The Bakah Al-Garbiah community health centre was established in 1958 to provide curative, preventive, and hospital care for a rural district with a predominantly Arab population. The small facility with 18 beds originally allotted six beds to adults, six to children, and six to obstetrics, but all the beds are now used for maternity cases. Other patients in need of inpatient care are referred to a nearby district hospital. The physician-in-charge at the centre supervises one neighbouring village and several district nurses, who are responsible for providing preventive care to three districts and their schools. These nurses report regularly and visit patients' homes to ensure that instructions are being carried out. This service has led to a remarkable decrease in the number of hospitalizations. Through the centre, primary dental care is also made available to some 5 000 schoolchildren. The Bakah Al-Garbiah health centre is the only health unit in Israel that provides all levels of medical care and training for medical students and student nurses. Statistical data are set forth on the number of day and night visits to the centre, obstetrics, antenatal care, pediatrics, house visits, and primary dental care. (EE)

2363 **Yodfat, Y.** *Two new approaches to health care delivery in Israel.* In Proceedings of the Fifth World Conference on Family Medicine, Melbourne, Australia, Oct 1972, 292-293. Engl.
Fifth World Conference on Family Medicine, Melbourne, Australia, Oct 1972.

Two new approaches to the use of the team in health care delivery in Israel are described; one approach, in a development town near Jerusalem, focuses on the teamwork of a physician and a family nurse who work in close cooperation with the local district social welfare worker. There are regular meetings of the team involving a nurse from the local mother and child welfare clinic and representatives of the local labour exchange and the local housing authorities. The team attempts to follow up every family in the centre's geographical area and to rehabilitate disturbed families. The second approach is used in a rural medical centre serving 12 villages. The team at this centre is responsible for the comprehensive care of the population of all the villages, including preventive medicine, meetings with social workers and village council heads, health education, etc. The entire population is subject to periodic screening, the results of which are computer-processed at the Hadassah University Hospital and stored at the centre. This centre is part of the Department of Internal Medicine 'A' of the Hadassah University Hospital. (Author abstract.)

2364 **Zauberman, H.** *Sight for sore eyes.* Kidma: Israel Journal of Development (Jerusalem), 3(3), 1977, 11-13. Engl.

The author outlines 20 years of medical assistance extended by Israel to Africans suffering from serious eye diseases, including cataracts, glaucoma, and onchocerciasis. In Liberia, Tanzania, Malawi, Ethiopia, Lesotho, and Swaziland, Israeli ophthalmologists have trained local medical assistants in eye care and have helped to establish ophthalmology services in hospitals and outpatient clinics. Israeli-trained personnel have also been stationed in critical areas to cope with emergencies and to refer patients requiring major eye surgery to departments of ophthalmology. In this way, a rather small group of professionals has been responsible for modern eye care for more than 40 million people. Such schemes are particularly feasible in ophthalmology, where surgery to correct blindness is often rather simple, quickly performed, and in competent hands, highly successful; furthermore, a system such as this is much less costly than caring for large numbers of blind persons. (EE)

2365 **Zauberman, H.** *Trip to Malawi, Lesotho and Swaziland.* Jerusalem, Hadassah Medical Organization, 19 Oct 1975. 4p. Engl.
Unpublished document; see also entries 2434 and 2476.

In a letter to the Deputy Director of the Foreign Office in Israel, an ophthalmologist reports in brief on ophthalmic services supported by Israeli personnel in Malawi, Lesotho, and Swaziland. The author comments that the Blantyre eye department, which has been under Israeli direction for 12 years, has been considerably enlarged and that medical assistants throughout the country refer patients to the eye department. In Lesotho, the first eye department has proved efficient and has put an end to the need for patients to travel to South Africa for eye care. In Swaziland, as well, the first eye department provides efficient inpatient care, although outpatient facilities are not sufficiently developed. (EE)

III.3 Mobile Units and Services

See also: 2195, 2308, 2314, 2336, 2343, 2359, 2365, 2608, 2614, 2701

2366 **Bisley, G.G.** *Mobile eye units in Kenya.* Israel Journal of Medical Sciences (Jerusalem), 8(8-9), Aug-Sep 1972, 1245-1249. Engl.

Mobile eye units, each staffed by three medical auxiliaries, provide eye care to scattered populations in rural Kenya. Under the direction of a medical assistant, they

treat the prevalent illnesses, such as cataract and infections. The medical assistant, the graduate of a 4-year paramedical training course with an additional year of ophthalmic training, is assisted by an enrolled male nurse and a driver. At present, there are five units, which are supervised by an ophthalmologist who regularly visits each unit and periodically participates in field-work. A lay administrator looks after financial matters, vehicle and equipment maintenance, etc. The team's work consists of visiting primary schools, where they teach ocular hygiene and treat conjunctivitis and trachoma. They also attend existing health facilities where they surgically treat entropion, leukoma, and senile cataract in adults. Each visit is publicized well in advance and the usual length of stay is 3 days: 1 day for seeing patients, a 2nd for operating, and a 3rd for bandaging. Local staff are instructed in postoperative care, but the unit tries to return to a centre wherever possible to examine and discharge cataract patients. After 6 years of unit operation, the author has no qualms about entrusting surgery to paramedical personnel, because the auxiliaries' results are usually as good as, or even better than, the ophthalmologist's. (HC)

2367 Consul, B.N. *Surgical aid to rural areas by mobile surgical unit.* Bombay Hospital Journal (Bombay), 2, Oct 1960, 171-176. Engl.

Since 1955, a 200-bed mobile surgical unit has annually treated 3 000-4 000 rural dwellers in Rajasthan State, India. The unit, which is staffed by 15 doctors, 30 nurses, and 30 other employees, travels to about 10 locations per year. It takes about 2 days to set up camp, 4-6 days for screening and operations, and 12-14 days to provide postoperative care. Visits are publicized in advance through circular letters, handbills, posters, etc., and the site is surveyed if necessary. Each year 10 000-15 000 patients are examined and treated for ailments not requiring surgical intervention. The service is free to the patients but costs about 300 000 rupees per year to maintain. Cost-per-patient is 15 rupees – much less than the cost of similar care in hospital. Further details regarding the staff, transportation, equipment, facilities, and logistics of the camp are presented and suggestions are made for more permanent staff, medical and dental facilities, mobile X-ray van, educational materials, etc. (HC)

2368 Imperato, P.J. *Nomads of the West African Sahel and the delivery of health services to them.* Social Science and Medicine (Oxford), 8, Aug 1974, 443-457. Engl. 24 refs.

Between 1968 and 1973, a nongovernmental group in West Africa designed and launched a mobile health scheme for nomadic tribes in the Sahel; earlier government health efforts had generally been resisted by the nomads because of misconceptions that the present scheme aimed to dispel. The scheme's short-term goals were to provide immunizations and basic care for the Tuareg and Maure nomads, to demonstrate the separation of health services from tax collection, and to introduce basic sanitation and hygiene. Its long-term goal was to persuade the nomads to make greater use of existing facilities. Personnel charted the nomads' movements and contacted the tribal leaders and three mobile teams visited the camps and attended 60-92% of the people. Subsequently, a measles outbreak demonstrated the value of immunization and cemented the success of the programme. The attitudinal change occasioned by the scheme was exhibited when a cholera epidemic threatened and the nomads sought services on their own. (HC)

2369 Luan, H.W. *New case-finding programme in a region of Taiwan.* Tubercle (London), 55(2), Jun 1974, 121-127. Engl.

A mobile health unit of nonmedical personnel collected sputum samples and conducted chest X-rays of adults with respiratory symptoms in a 1971 tuberculosis case-finding programme in the Chiayi region of Taiwan. As a result of the house-to-house sputum collection carried out in 512 villages, 20 452 patients were registered and examined, of whom 144 had positive results from microscopy. A further 186 cases were discovered by examining sputum from patients with abnormal X-ray films and another 51 had positive laryngeal swab cultures. In all, 281 bacteriologically confirmed cases of pulmonary tuberculosis were identified (9.0 per 1 000 registered), 51% at the first home visit. This method allows for both rapid identification of sources of infection in the community and later identification of bacteriologically active cases who are unable to provide sputum samples initially. Statistical data are included. (Modified journal abstract.)

2370 Patton, O. *Preventive health services in rural areas: Victoria Province.* Rhodesian Nurse (Salisbury), 9(1), 15-18 Mar 1976, 15-18. Engl.

The government health services in Victoria Province, Rhodesia, supplement the activities of mission and local groups; they include mobile well-baby, family planning, tuberculosis, and leprosy clinics and are staffed by a medical officer, tuberculosis medical officer, 3 health inspectors, 9 public health nurses, 48 health assistants, 4 drivers, 60 birth control pill distributors, clerical workers, and trainees. The services incorporate health inspections of commercial and health facilities and staff undertake case-finding and follow-up measures. The latter duties are primarily the responsibility of the health assistants, who travel on bicycles, ensuring that TB, leprosy, and mental patients continue treatment and that early cases of illness are reported. (AC)

2371 Shah, P.M. *Promotion of adequate growth and continuous health care through under five's clinics.* Indian Pediatrics (Calcutta), 12(1), Jan 1975, 131-133. Engl.

The rural health unit, Palghar, India, has initiated a domiciliary outreach programme to ensure continuous under-fives' care. Auxiliary nurse midwives (ANMs) and part-time social workers, who are local middle-aged women with some schooling, take a practical 10-day training course on record-keeping; weighing, immunizing, treating, and deworming children at home;

and educating mothers on health and nutrition. Each part-time social worker is responsible for a population of 2 500-2 700 in two to four villages located within 4-6 km of her own home. She is required to work a minimum of 4 hours per day for which she is paid 60 rupees per month. The doctor from the rural health unit supervises the activities of the social workers and ANMs and visits each village once a month. Results of the programme include an enhanced consciousness of the role of nutrition in child health. This is demonstrated in mothers' attitudes – before the programme began 66.7% of the mothers felt medicines were required to care for malnourished children; later, they recognized that diet was responsible for recovery. (HC)

2372 **St. George, J.** *Two-wheel collapsible stretcher trolley for bush-track roads.* Tropical Doctor (London), 6(4), Oct 1976, 191-192. Engl.

A new two-man stretcher trolley has been designed to facilitate the transport of nonambulatory patients over difficult terrain. The trolley has only two wheels and thus moves easily over uneven surfaces. The tires are solid rubber and the framework of steel tubing is strong enough to support heavy loads yet light enough to be easily carried by one person when disassembled. The sections of the trolley screw together so that it does not collapse during use and a special apparatus clips around the stretcher's handles. The trolley weighs 7.5 kg and costs approximately U.S. $90. A sketch of the trolley with measurements is included. (RMB)

2373 **St. George, J.** *Obstetric flying squad: a method of reducing maternal mortality and morbidity in developing countries.* Tropical Doctor (London), 5(3), Jul 1975, 110-115. Engl. 14 refs.

To treat cases of obstructed labour, postpartum haemorrhage, and advanced eclampsia, a maternity hospital in Katsina, Nigeria, organized an obstetric squad consisting of an ambulance, emergency equipment, a driver, and one or more nurses. The squad aims to prepare patients for their journey to hospital, dissuade them from ingesting food or indigenous medicine, ensure that they are accompanied by potential blood donors, and provide them and their relatives with information about services that are available to them on request. The programme, after 9 months of operation, has made a remarkable difference in maternal mortality. Of 35 patients taken to hospital by the squad, only 2 died, whereas there were 23 deaths among 119 patients who traveled to hospital on their own. The hospital stay was also considerably less for those patients admitted by the service. It is concluded that introducing such a service reduces maternal morbidity and mortality and, thus, can increase the public's confidence in hospital services. (HC)

2374 **Suleman, S.K.** *Organization of a rural orthopaedic service in Kenya.* Tropical Doctor (London), 6(1), Jan 1976, 30-32. Engl.

Six orthopaedic surgeons undertake 3-day safaris to district hospitals in rural Kenya, treat patients, and advise medical officers on follow-up; their activities are complemented by a mobile orthopaedic clinic, which deals with crippled children. The unit, comprising two (volunteer) physiotherapists, a supply of plaster of Paris, calipers of all sizes, and orthopaedic boots, travels through the countryside on a well-publicized route. Staff examine the crippled children who have gathered at each stop, note their deformities and probable management, fit them for calipers or casts which will be changed during the next visit 4 weeks later, and refer those requiring surgery to the district hospital. In 1973, a total of 41 797 orthopaedic patients were treated. Recently, a 4-year programme for training orthopaedic auxiliaries has been devised. The first 3 years are similar to medical assistant courses and the last is devoted to specialized orthopaedic procedures, plaster applications, and minor surgery. Plans are for the graduates eventually to replace the volunteer physiotherapists in bringing orthopaedic care to rural areas. (HC)

2375 **Tanne, F.** Kupat Holim, Tel Aviv. *Ambulatory pediatric services in Israel.* Kupat Holim Yearbook (Tel Aviv), 4, 1975, 30-41. Engl. 14 refs.

Present ambulatory pediatric services in Israel are reviewed and some solutions to the existing deficiencies are suggested with special emphasis on primary care. Preventive health services, which comprise maternal and child care and school health services, are available in every community, irrespective of size and location; they are provided by the Ministry of Health, municipalities, and the Sick Fund of the General Federation of Labour. Suggestions for change are that the delivery of pediatric care and especially primary pediatrics be planned so that the services fit the needs of the community and that as much attention be devoted to the prevention of disease as to its treatment. The concern for the child must begin in the antenatal period and continue throughout infancy, childhood, and adolescence. Health education, social services, and nutritional guidance should be available and a unified record system must be introduced, which would serve as a checklist for care and a tool for evaluation of services and applied research. (EE)

2376 **Willson, M.A., Halonen, R.J.** *Health wagon delivers primary care to rural areas.* Hospital Progress (St. Louis), 57(3), Mar 1976, 34-38. Engl.

Since 1973, a mobile health unit, based at St. Mary's Hospital, Richmond, Virginia (USA), has provided primary health services to two deprived rural communities nearby. Previously, because of low incomes and poor transportation, the inhabitants had in practice no access to health care. Now, the mobile unit provides initial examination, ongoing care, prenatal follow-up, minor illness treatment, and referral. It is staffed by two nurses and two health aides – members of the target communities who have been trained by the hospital for work in the unit. It maintains liaison with the communities through a policy board whose 14 members comprise 8 community representatives, 2 hospital representatives, an elected volunteer, 2 members of a sponsoring church, and a member of the county health department. (AC)

2377 **Wood, A.M.** *Use of modern forms of communication and transport in community medicine.* In Gould, G.C., ed., Health and Disease in Africa: the Community Approach, Nairobi, East African Literature Bureau, 1971, 33-38. Engl.
Seventeenth Annual Scientific Conference of the East African Medical Research Council, Nairobi, Kenya, 1970.
For complete proceedings see entry 2753.

On the basis of information collected by the African Medical and Research Foundation (Kenya), the author outlines the costs, advantages, and disadvantages of using radio, light aircraft, and mobile land units to distribute medical care in remote areas. The radio can be used for consultations, emergency requests, arrangements for routine visits and supplies, aircraft assistance, and contacts with isolated medical personnel. Smaller vehicles, such as the Land Rover and the Volkswagen minibus, are preferable to larger units (despite limitations in cargo space) because of poor road conditions. The author points out that light aircraft, although more expensive initially, are at least five times as fast as land transport and are dependent only on 1 000 yard airstrips rather than entire road systems. (RMB)

III.4 Community Health Education

See also: 2152, 2192, 2194, 2227, 2248, 2273, 2277, 2288, 2297, 2303, 2305, 2311, 2318, 2333, 2334, 2343, 2359, 2368, 2433,2509, 2579, 2582, 2601, 2603, 2610, 2616, 2636, 2642, 2651, 2658, 2723, 2727, 2732, 2771, 2795

2378 **Akram, B.M.** *Responsibility of the community for healthy living.* Hamdard Medicus (Karachi), 14(3-4), Jul-Sep 1971, 57-58. Engl.
For complete proceedings see entry 2394.

Water scarcity and the poor management of food are the causes of most of the health problems in Pakistan and their ill-effects are compounded by the community's lack of knowledge about the basic elements of healthy living. Public health programmes, therefore, must concentrate on providing a safe water supply, encouraging suitable techniques in food production and handling, and educating the public. For the last priority, small teams of students, social workers, etc., could be organized to teach health practices in the home, cleanliness, personal hygiene, thorough washing of food, and rubbish burning. Health professionals could also be enlisted to teach healthy habits to their patients. (AC)

2379 **Alba, W.** *Formacion y funciones de los educadores para la salud en el Peru. (Training and functions of health educators in Peru).* International Journal of Health Education (Geneva), 18(4), Oct-Dec 1975, 257-263. Span.

As part of its national health plan (1975-1978), Peru is planning to introduce a training programme for health educators in the School of Public Health. The course will prepare health educators to instill in individuals, families, and communities the desire for better health and the will to attain it. Health educator functions include helping health personnel to recognize educational opportunities in their daily work; contributing to the planning, implementation, and evaluation of the educational component of the training of all health team members; acting as liaison between the health team and the public and private institutions concerned with health and welfare; participating in the planning, implementation, and evaluation of the educational component of specific health programmes; disseminating innovations in health education methods; participating in research aimed at the development of more effective health education techniques; and designing, testing, and putting into use tools for evaluating the efficacy of health education. An estimated 47 educators are required, mainly for deployment at the regional and district levels. (HC)

2380 **Aujoulat, L.P.** Comite Francais d'Education Sanitaire et Sociale, Paris. *Education sanitaire pour l'Afrique. (Health education for Africa).* Paris, Editions Nouvelles et Impressions, Collection Comment Mieux Vivre, No.2, 1967. 112p. Fren.

Despite the fact that the African nations held eight regional conferences on health education between 1957 and 1965, they have not yet perceived health education as a worthwhile economic investment and have not integrated it into national planning. This seeming paradox is only one of many noted in this book on health education in Africa. Subjects that are covered are the obstacles to and opportunities for mass health education, the necessary characteristics of health education, its targets, and its implementation. Specific examples of programmes and methods are given which include educational possibilities presented by mass campaigns in trypanosomiasis, malaria, leprosy, smallpox, and eye diseases; the search for a methodology of health education; the utilization of group discussion, radio, films, theatre, etc.; and the role of the health educator in motivating other health personnel. Some suggestions are presented for more efficient organization and planning in national health programmes. (HC)

2381 **Begg, N.C.** *Child health and sickness.* New Zealand Medical Journal (Wellington), 81(533), 12 Feb 1975, 100-105. Engl.

In New Zealand, for more than half a century, community-based volunteers known as the Plunket Society have been promoting child health. The society employs Plunket nurses who visit and advise parents in assessing the growth and development of children and work with local citizens in mobilizing support for child health programmes. A recent study conducted in a suburb of 7 000 people near the city of Dunedin underlined the role played by nonprofessional groups like the Plunket Society. A sample of 247 preschool children

was observed over a 3-month period; during the study, 100% had been cared for by 311 parents or foster parents, 55% had been examined by their Plunket nurse, 29% had consulted the family doctors, and 2.4% had requested admission to a hospital. The observations indicated that the greatest responsibility for child health rests not with the specialist who sees only 2.4% of the children but with the parents who see that their children are properly fed, clothed, educated, immunized, etc. The Plunket Society and associations like it are valuable means for helping parents fulfill their role. (HC)

2382 Beye, I. *Education sanitaire. (Health education).* In Sage Femme et la Sante Familiale: Rapport du Seminaire Francophone Ouest Africain, London, International Federation of Obstetrics and Gynaecology, 1975, 83-87. Fren., Engl.
Francophone West African Seminar on the Role of the Midwife in Integrated Family Health Services, Dakar, Senegal, 17-23 Nov 1974.

Health education, a process that fosters health-producing attitudes and behaviour, constitutes a more effective and less expensive means of reducing illness than does medical care. Hence it is an appropriate technology for countries with limited resources. To be successful, it must be realistic and practical – inculcating in the individual a positive idea of health, a sense of responsibility for his own health, and a willingness to participate in the health of the community. It must respect traditional values, exploiting those that have a positive effect on health, and must be comprehensive, persuasive, etc. These are the principles upon which the Bureau of Health Education, Senegal, has based its health education campaign, which will involve all health personnel but will especially rely on midwives as agents of prevention, who will be expected to organize group discussions, speak to women and present audiovisual materials, plan family health education programmes, etc. (HC)

2383 Chaudhuri, S.N. *Nutrition education through under fives' clinics.* Indian Pediatrics (Calcutta), 12(4), Apr 1975, 339-341. Engl. 10 refs.

Two under-fives' clinics in the slums of Calcutta, India, provide nutrition education as an integral part of their programme. They employ several media, including a blackboard in the waiting room, colourful posters with explanations in the local language, and volunteers who discuss nutrition with illiterate mothers. Other elements of their programmes are a parent-retained health card that plots the growth of the child and encourages the mother to bring the child back to the clinic for another weighing; a nutritious cereal-pulse mixture for weaning, which is made available at low cost; and a routine of immunization and treatment that encourages clinic attendance. Once a month, a child health worker visits each mother who has a child registered in the clinic, advises her on nutrition, and demonstrates nutritious cooking in the home. The child health workers are chosen by their communities and trained in the local hospital; they supply an element of personal contact with the programme and may eventually function as agents of change. (HC)

2384 Chowdhury, Z. *Mother and child in Bangladesh: a view from the People's Health Centre (Gonoshasthaya Kendra).* Assignment Children (Geneva), 33, Jan-Mar 1976, 68-77. Engl.

Gonoshasthaya Kendra is a cooperative health programme begun in 1972 in Bangladesh and currently run by four physicians. In the early stages, the programme concentrated on training paramedics and recruiting village *dais* (midwives) to the family planning/child health effort. It soon became evident, however, that health problems could not be isolated from other socioeconomic factors, such as food shortages and the status of women. The programme was, therefore, expanded to include the formation of a corps of village-recruited paraprofessional agricultural workers, experiments in fish- and duck-raising and the cultivation of high-yield rice, a cooperative land cultivation scheme that not only provides local people with work and food but also demonstrates the effectiveness of labour-intensive techniques, and a women's vocational centre that helps widowed, divorced, or unmarried women to achieve economic independence. From the beginning, efforts have been made to make the programme self-sufficient; villagers have contributed land for the hospital and clinic sites and, through service charges and health insurance fees, 50% of the recurring costs of the programme are recovered. The programme now serves 100 000 people; when the target of 200 000 is reached, it should be almost self-sufficient. (HC)

2385 Community Health Education and Motivation Programme, Sarawak, Malaysia. *In practice: case studies: Malaysia/Sarawak.* In Rifkin, S.B., ed., Community Health in Asia: a Report of Two Workshops, Singapore, Christian Conference of Asia, Jun 1977, 60-83. Engl.
See also entry 2408.

The Community Health Education and Motivation Programme (CHEMPRO) sends teams of volunteers into rural communities in Sarawak and aids the populations to select leaders, organize village development committees, and implement health-related programmes. The teams contact village leaders, encourage villagers to discuss what is felt to be their greatest need and identify possible steps and personnel to meet it, provide 3-5 days of leadership training, and offer counsel during the project. They receive backup from the government medical department, which enthusiastically supplies materials and advice. The result is that villagers become aware of the resources available to them for other projects and ongoing programmes, such as immunization and child health. A checklist used in evaluating projects is included. (HC)

2386 Courtejoie, J., Rotsart de Hertaing, I. Centre d'Etudes et de Recherches pour la Promotion de la Sante, Kangu-Mayumbe, Zaire. *Education de la sante dans l'enseignement primaire et secondaire: experience pratique de Kangu-Mayumbe. 2*

edition. (Health education at the primary and secondary level: the practice at Kangy-Mayumbe. 2 edition). Kangu-Mayumbe, Zaire, Centre d'Etudes et de Recherches pour la Promotion de la Sante, Brochure Illustre No.5, n.d. 31p. Fren.

See also entries 2326, 2590, and 2591.

This handbook for health educators sets forth practical examples for integrating health education into the primary and secondary school curriculum. It is suggested that the study of preventive medicine be incorporated into the anatomy and physiology courses, that the zoology course include lessons on the life cycles of vectors of prevalent diseases, that the hygiene course deal with the etiology and control of malaria and intestinal parasites, that mathematics lessons include problems based on health, and that civics courses stress personal responsibility for disease transmission. It is also recommended that school health activities be prefaced by a detailed explanation; that school excursions include visits to hospitals, laboratories, water purification plants, etc.; and that health personnel be invited to the school to speak on their respective roles. A study illustrating the effect of health education on student health is cited. In a secondary school in Mayumbe, three groups of students were tested for worm infestations: those who had never been subject to an anti-worm campaign, those who had participated in the campaign for 2-3 years, and those who had participated for 4-5 years. Results showed that 94% of the first group had infestations of one or more kinds of worm, 83% of the second group had similar infestations, and only 20% of the third group were infected, all by only one kind of worm. It was concluded that a concerted health education effort yields positive results after 4-5 years. (HC)

2387 Cutting, W.A., Cutting, M.M. *Experience with a nutrition rehabilitation unit in the management of protein calorie malnutrition in a rural hospital.* Indian Pediatrics (Calcutta), 12(1), Jan 1975, 99-100. Engl.

A nutrition rehabilitation unit attached to a rural hospital in Andhra Pradesh, India, treats children suffering from protein-calorie malnutrition and educates parents about nutritious meals. Its facilities include sleeping accommodation for mothers and children, kitchen and dining areas, space for teaching and recreational activities, and storage, bathing, and toilet facilities. A nutritionist and village health demonstrator, who staff the unit, supervise mothers and grandmothers in preparing a nourishing diet of locally available food using local techniques and instruments. The unit has proved useful, but its success has been curtailed by two factors. The first is the severity of malnutrition and the many medical complications that accompany it and require intensive medical care leading the parents to believe that improvement is due to medication rather than diet. The second is that wage-earning mothers cannot afford to lose pay by taking up residence in the unit and, consequently, often return home before their child's treatment is complete. The cost of running such a unit in India is estimated at 10-20 rupees per bed per day. (HC)

2388 Dysinger, P.W., Stafford, C.R., Hart, R.H., Lonergan, L.H., Lorensen, R.G. *Health problems of the Waha tribe.* Medical Arts and Sciences (Loma Linda, Tanzania), 26(3-4), 1972, 43-55. Engl.

A training programme for health education assistants from nine African countries was begun in 1962 by the Loma Linda University, Tanzania, and continued shortly thereafter by the Seventh Day Adventists at Hera Hospital. The 10-month training course aimed to prepare church-affiliated mission workers, medical workers, and teachers to provide health education to tribal communities, such as the Waha. A programme evaluation conducted 10 years later assessed the impact of the training course on the basis of individual reports from the assistants, personal observations made by church administrators, visits with the assistants and their employers by Loma Linda faculty members, and a questionnaire. Findings indicated that the programme had improved the assistant's personal and family health, promoted investments in local health environment, been appreciated by government officials, and increased the efficiency of the participants. Although this type of programme constitutes an effective and economical approach to preventive medicine and public health in a tribal setting, this particular programme could be improved by greater encouragement of the assistant at the mission administrative level. (HC)

2389 Dzinjalamala, H.T. Malawi, Ministry of Health, Health Extension Service. *Water protection project.* MOYO (Blantyre), 8(3), Apr 1976, 5-8. Engl.

Health inspector trainees attending Polytechnic in Malawi undertake projects in water protection, recently they aided rural villagers to repair a well that no longer protected the water supply. A community development assistant supported the students and mobilized the villagers to collect sand and stones. the regional health office donated cement, and the Polytechnic school obtained the reinforced concrete cylinders for the project. The students and villagers drained the water from the existing well, laid a rock foundation, placed the cylinders on the foundation, and fashioned a masonry coping 5 feet above ground with a trough and outlet pipe. Evaluation of the project indicated that the use of the cylinders was costly and dangerous (each weighed 1 000 lbs.) but that the overall benefits to community and students were worth the expense. (AC)

2390 Fisher, D.W. *Adult education theory necessary in health education practice.* International Journal of Health Education (Geneva), 19(2), Apr-Jun 1976, 129-135. Engl. 20 refs.

To date, principles of adult education have not been widely applied to health education, although traditional patterns of teaching-learning have not proved effective. At present, most health professionals assume that imparting health information is providing health education, whereas research studies have shown that only 7% of a message's impact comes from the words used and that 93% comes from the educator's tone of

voice and nonverbal behaviour. This finding combined with research on patient compliance (at least one-third of patients fail to comply with instructions for therapy) says a great deal about health professionals' nonverbal behaviour. They have not created a satisfactory learning environment; they have failed in some way to respect the learner (patient), involve him in decision-making, pass information freely and honestly to him, and share with him the responsibility for defining goals, planning, identifying activities, and evaluating progress. (AC)

2391 Galavez-Tan, J., Grenough, M., Lorilla, L., Lumalang, A., Montoya, E.R. *In practice: case studies. Philippines.* In Rifkin, S.B., ed., Community Health in Asia: a Report on Two Workshops, Singapore, Christian Conference of Asia, Jun 1977, 85-98. Engl.
See also entry 2408.

The Bukidnon Committee for Community Organization trains and encourages the citizens of Bukidnon – a mountainous, inland province in the Philippines – to solve their own political and economic problems. In 1975, the organization was asked by a group of mothers for its help in securing a nutrition programme that could not be handled by the small local health facility. The organization outlined a number of external agencies available and the women decided to tap the consultative services of the Rural Missionaries and the material resources of UNICEF. The Rural Missionaries helped design a community development seminar and the eight participating *barrios* chose 22 trainees to attend. The seminar introduced the trainees to structural analysis and role playing and afterwards the trainees organized themselves into working committees. Since then, they have elected area coordinators and held monthly meetings in which private medical professionals sometimes participate. This experience indicates that a health component can be added to an existing rural development organization once the people have recognized the need for health services. (HC)

2392 Greaves, J.P. *Nutrition education: or education in child care?* New Delhi, Coordinating Agency for Health Planning, CAHP No.209, 22 May 1973. 5p. Engl.
Also appeared in Indian Paediatrics (Calcutta), 10, 1973, 347-349.

To promote consistency in child care education in India, the author proposes nine basic messages for use in teaching mothers to care for newborns. They are to: breast feed as long as possible, introduce semi-solid foods at age 5-6 months, feed young children 5-6 times a day, continue regular feedings when child is ill, make use of available health services, ensure children are immunized, practice personal hygiene, drink clean water, and give birth to no more than two or three children 2-3 years apart. These basic messages imply other principles, such as: expectant and lactating women should eat more than the usual amount of cereal or pulse, green and yellow vegetables, and fruit; expectant mothers should see a doctor or auxiliary nurse-midwife during pregnancy and later while they are nursing; children's diets should be the same as their families by the time they are a year old but they should eat more frequently (3-4 times daily); rice and vegetables should not be cooked in excessive water; etc. All these principles should be adapted to the particular region in which they are being taught. (HC)

2393 Ingham, G.K. *Program to investigate the feasibility and effectiveness of a series of inexpensive, portable, readily-reproducible audiovisual productions relating to African village health education and development.* Hamilton, Ont., Hamilton Africa Goodwill Foundation, n.d. 5p. Engl.
Unpublished document.

This four-phase project aims to develop a set of audiovisual materials for use in health education at the village level in Africa; the materials are to be used in a preventive-curative programme offered by itinerant nurse-midwives. The four phases consist of reviewing experiences in village health education and designing an approach, undertaking a feasibility study in at least two areas of Africa, developing the first production packet based on information gleaned in phases one and two and consisting of no less than seven programmes, and replicating film strips and disseminating them. The development phases require seven personnel functions, i.e., an experienced producer, a physician, an on-site coordinator (vital in ensuring that local initiative is involved in all stages of planning and implementation), an artist (preferably African), an interpreter (possibly the nurse-pharmacist), a nurse-pharmacist, and an audiovisual technician (a young village adult trained to operate the projector and assist the nurse). Actual implementation of the project involves the nurse-pharmacist and the audiovisual technician armed with a rugged, relatively inexpensive projector; synchronized audio tape and speaker; a portable gasoline-powered electricity generator; and a portable, self-supporting 10-foot plastic projection screen. Equipment should be transportable on two bicycles. The importance of involving local as well as outside initiative in both effort and funding in all phases of the project is stressed. (HC)

2394 Institute of Health and Tibbi (Medical) Research, Karachi. Said, H.M., ed(s). *Health of the Nation Conference proceedings.* Karachi, Institute of Health and Tibbi Research, Jul-Sep 1971. 505p. Engl.
Individual articles have been abstracted separately under entries 2484, 2579, and 2601.

In 1971, Pakistan's Institute of Health and Tibbi Research sponsored a health conference whose objectives were to create health consciousness in sanitation and disease control, to assist groups engaged in health education to raise funds for the health movement, and to encourage suitable policymaking at the national level. The proceedings of the conference have been compiled in this monograph and the information has been divided into three parts. The first part includes 46 papers that were delivered at the conference; the second is a

mixture of articles on health services in various developed and developing countries; and the third comprises health education materials. The conference papers cover health and its relationship to the public, traditional and commercial medicines, the mass media, industry, the home, and the state; these subjects provide the main focus for 39 recommendations arising from the conference. A memorandum that sets forth the sponsoring institute's rules and regulations is appended. (AC)

2395 International Development Research Centre, Ottawa. Dakar Regional Office. *Famille et developpement. (Family and development).* Dakar, International Development Research Centre. Fren.

Family health and welfare are the focus in this quarterly publication concerning African life. Each edition carries highly informative and up-to-date articles on child-rearing, education, health, nutrition, family planning, sex, etc. Readers are encouraged to put forward their views and to initiate discussion of topics that concern them – e.g., problems arising from a clash between traditional and modern values or practices. Inherent throughout is the recognition that improvement in the quality of life is less a function of the decisions of politicians and administrators than of increased awareness at the grass roots level. (HC)

2396 Jelliffe, D.B., Jelliffe, E.F. *Infant food industry and international child health.* International Journal of Health Services (Westport, Conn.), 7(2), 1977, 249-254. Engl. 13 refs.

Since World War II, the international infant food industry has been primarily responsible for the decline of breast-feeding in areas where bottle-feeding is neither economically nor hygienically feasible; it has, therefore, contributed markedly to infant malnutrition and death. It has resorted to unethical methods of advertising that include exploiting the mass media, courting the medical profession (endorsement by association), and employing health professionals ostensibly as infant care agents to circulate samples of their products to new mothers and health workers at home, in hospital, and in health centres. Furthermore, it has promoted bottle-feeding as a means to prestige and upward social mobility. Recently, however, the infant food industry has been called to account for its behaviour. Pressure has built from a few journal articles through nutrition consciousness-raising conferences to a determined legal attack. The success of the movement against the milk companies has been substantial – for example, a group in Switzerland printed a booklet "Nestle totet babies" (a translation of "The baby killers"). Nestle filed suit, but the defense's evidence was so straightforward that the judge fined them only a nominal 300 francs and then cautioned Nestle on its advertising techniques. In addition, actions in the USA are pending against Bristol-Meyers and Beech-Nut Baby Foods for their unethical tactics. (AC)

2397 Keller, W.D. *Involvement of nursing, paramedical, and social workers in combating protein calorie malnutrition.* Indian Pediatrics (Calcutta), 12(1), Jan 1975, 111-113. Engl.

A minimum programme of nutrition-related activities is suggested for integration with the daily tasks of auxiliary and paramedical health workers in India. The programme includes noting and referring patients with moderate and serious protein-calorie malnutrition; weighing all children under age 5 and comparing weights with a weight-for-age chart; advising mothers on the need for nutritious supplement, its quantity, and frequency during weaning; urging parents to ensure their child's fluid and food intake during infections; encouraging hygienic infant feeding; distributing iron to pregnant women; and providing vitamin A to pregnant women, newborns, and persons suffering from night-blindness. This programme may be complemented by keeping clinical records of weight for age, visiting children with protein-calorie malnutrition, providing more detailed advice on child feeding and the preparation of food, offering a simple oral rehydration service for home use, etc. It is pointed out that nutritional counseling may be greatly simplified if workers recognize that a change in quantity of children's diets may be more important than a change in quality. (HC)

2398 Kimhi, A., Oleinik, N. Kupat Holim, Tel Aviv. *Irgun kehilati imatarat hinuch le-briut. (Community health education program).* Family Physician (Tel Aviv), 1(3), 1971, 59-64. Hebrew.

In 1969, a programme to improve public health conditions through health education was introduced in a semi-rural township in Israel. It served a population of approximately 10 000, of whom 40% were younger than 18, and was supervised by the staff of the township's central medical dispensary. The staff formed a nucleus around which a work group of social workers, youth leaders, teachers, and voluntary workers revolved. The nonmedical team received instruction on general principles of health care, such as cleanliness, handling of food, how to deal with the common cold, sex instruction for adolescents, and prophylactic measures; they, in turn, passed the information to students in classrooms, youth centres, and clubrooms. Teaching material, in the form of coloured slides, simple illustrated pamphlets, posters, and leaflets, was used to assist the instruction. In this way, a small medical team could reach a substantial part of the community. The programme has proved itself and is now also applied to other communities. (EE)

2399 King, K.W., Fougere, W., Webb, R.E., Berggren, G., Berggren, W.L., Hilaire, A. *Preventive and therapeutic benefits in relation to cost: performance over 10 years of mothercraft centres in Haiti.* New York, Research Corporation, 1975. 42p. Engl.
Unpublished document.

At reasonable cost, mothercraft centres in Haiti have netted substantial returns in improved child health for malnourished children and their younger siblings. The

centres, which are operated by nonprofessional personnel, are dedicated to rehabilitating malnourished children and educating mothers on appropriate child care. When a centre is set up in a village, staff members screen all the children, recording age, sex, name, weight and presence or absence of oedema. These data are compared and the 30 most malnourished children are identified. Their mothers are then invited to enroll their children at the centre. For admission, mothers must guarantee their child's attendance all day, 6 days a week, and must agree to work in the centre 1 day a week. After 3 or 4 months, the mothers and children graduate and the next group comes in. During the programme, the staff prepare meals at the centre using traditional cooking equipment, fuel, and foods in amounts within the financial grasp of their clients. In addition, they gently urge mothers to follow centre procedures by pointing out the improved growth, alertness, and physical activity of the children. The results have been outstanding. Several studies using control populations have indicated that not only do malnourished children recuperate, but they continue to improve after release and their younger siblings never have to cope with the ravages of malnutrition. (AC)

2400 Koppert, J. Christian Medical Commission, World Council of Churches, Geneva. *Guide to nutrition rehabilitation.* Contact (Geneva), 23, Oct 1974, 1-16. Engl., Fren.

A nutrition rehabilitation unit is a place where mothers can take part in the rehabilitation of their malnourished children and can learn how to feed themselves and their families nourishing meals from foods and methods consistent with their culture and environment. At the unit, which is housed in the local tradition, the mothers work in the gardens and feed their own child (or children). They are taught the basic elements of nutrition, homecraft, and hygiene and the importance of self-reliance and preventive care. The staff comprises 2 house mothers to as many as 6 mothers and 10 children. A programme of daily activities derived from a unit in Lusaka, Zambia, and charts of nutritional requirements are presented. (HC)

2401 Lutwama, J.S., Bennett, F.J., ed(s). *Health education in eastern Africa: a challenge to the schools.* Nairobi, Longman Group, 1973. 143p. Engl. Refs.

This manual was designed to provide teachers in East Africa with methods for relating school subjects to home activities. The scope of the book was largely determined by a survey that examined what schoolchildren want to know about health; the results of the survey are summarized in the final chapter. Topics covered in the book include what teachers need to know about health in East Africa (sanitation, the structure and function of the human body, personal hygiene, common diseases of childhood and infancy, etc.); programme possibilities for health in the school (available resources, health assessment of schoolchildren, immunization, first aid, dental health, nutrition, methods and techniques of health education, the school as an example of a healthy environment, etc.); and health in the community (diseases related to smoking, alcohol, and sex; sex education; information on available health and welfare services; self-help community efforts for better health; etc.). Appendices include lists of further reading material and a glossary of medical and technical terms, which are conveniently underlined as they occur in the text. (HC)

2402 Mertens, P.E., Tompkins, K., Konie, T.W. Curran Lutheran Hospital, Monrovia. *Transportation for progressive health care.* Monrovia, Curran Lutheran Hospital, n.d. 12p. Engl. Unpublished document.

A brief history of the Curran Lutheran Hospital, a 200-bed inpatient facility located in the rural Zorzor District of Lofa County, Liberia, is given and its proposed budget and activities for the year 1974 are outlined. The hospital is undertaking an outreach project aimed at bringing health education, immunization, and under-fives' clinics to surrounding towns accessible by road but not yet served by clinics. The project's specific objectives include antenatal care for 600 pregnant women, training in maternal child health for 250 midwives, and sanitation seminars for elders in the district. Other plans are that teaching materials designed for illiterate readers will be field-tested, 5 500 school children will receive "lesson reminders", radio programmes will be broadcast in two local languages, all 36 clinic workers in the district will receive in-service training, and 5 000 women of childbearing age will be informed about contraception and urged to take advantage of the hospital's family planning services. In addition, district health workers and other health workers will continue to receive the hospital's monthly bulletin, *Health Habit.* (HC)

2403 Misra, K.K. *Safe water in rural areas: an experiment in promoting community participation in India.* International Journal of Health Education (Geneva), 18(1), Jan-Mar 1975, 53-59. Engl.

A piped water supply project based on community ownership and management was devised to serve seven villages in Uttar Pradesh, India. After baseline surveys revealed general opposition to the project, special effort was expended on community education. Educational efforts were concentrated first on a seven-member waterworks executive committee of representatives from each village and afterwards on the rest of the community. A number of surveys (diarrhea, stool sample, and morbidity) were conducted to demonstrate the relationship between water supply and health and educators began meeting informally with the villagers in small groups. During these group meetings, the benefits and convenience of piped water were pointed out, misconceptions about piped water were corrected, and simple cost-benefit arguments were put forward in support of the scheme. Ten years later, 350 out of 836 families had subscribed to private house connections at their own expense and the remaining families were drawing water from 42 public stand posts. The project was still

being managed by the elected waterworks committee and no water charges were in arrears. (HC)

2404 Mount Carmel International Training Centre for Community Services, Haifa, Israel. *Courses on rural community development: field work in Thailand.* Haifa. Israel. Mount Carmel International Training Centre for Community Services. Jun 1976. 37p. Engl.

After completing a 7-month course on rural community development, a group of nine people from Iran, Korea, Nepal, and Thailand undertook 1 month field work in a rural village in Thailand. They were joined by a group of professional workers from the Thai Community Development Department, who helped conduct a detailed study of the habits of the community's 135 inhabitants by investigating their health status and available services. Study findings indicated that the villagers took little advantage of a nearby (1 km) district clinic that was staffed by one physician, two nurses, two midwives, two assistant nurses, and three sanitation officers. In fact, only 12% of the sick people used the district clinics; another 12% went to a private doctor; two of the three tuberculosis patients relied on home treatment; and some of the people preferred to buy medicines at the market or at the pharmacy. Based on these findings, the group recommends improvements, including comprehensive sanitation, more modern agricultural methods, home economics, better infant nutrition, the establishment of a child development centre, and improved education. A diagram showing the interrelated problems in the village as well as a map are included. (EE)

2405 Nagaraj, S., Rao, K.G., Mehta, J.N., Abrol, U., Saxena, H.M., Chugh, K.L. *Health education status in teaching hospitals and associated health centres in India.* International Journal of Health Education (Geneva). 18(3). Jul-Sep 1975. 157-165. Engl.

A study was undertaken in India to assess the extent of and potential for health education during health worker/patient-or-relative contacts. Investigators observed worker/patient encounters in two teaching hospitals and their health centres and questioned both workers and patients-or-relatives. General information about patients and workers was recorded and the duration of each patient's stay in the facility noted. Upon completion of the study, workers had reported more attempts at patient education than were observed and 85% of them had expressed a belief that evidence of education would be a change in knowledge rather than a change in attitude (10%) or behaviour (6%). Of 1 415 interactions, 968 involved verbal instructions or directions rather than education and time spent per patient averaged from 2-5 minutes. Information received by the patient was generally well-retained, especially when related to treatment, and 28% of patients (36% of patients and 23% of inpatients) were fully satisfied with the information received, 50% were partially satisfied, and 22% were dissatisfied. Whereas workers saw a need for general health education, patients wanted more information in disease-related areas. Recommendations from the study stress the need for streamlining educational content to fit brief worker/patient encounters, involving all health personnel in the development of health education content and its dissemination, producing more printed literature, and organizing more educational activities for outpatients during waiting periods and for inpatients during recuperation. (HC)

2406 Nguyen, V.M. *Aprovisionnement en eau potable dans les agglomerations rurales au Nord Vietnam. (Providing drinking water in the rural areas of North Vietnam).* Sante Publique (Bucharest). 17(4). 1974. 475-480. Fren.

Providing its rural inhabitants with pure water supplies has been one of the chief preoccupations of the Ministry of Public Health in the Democratic Republic of North Vietnam. An inexpensive technique for the construction of wells has been popularized and various methods of filtering and purifying water have been developed. One of these involves immersing a porous container of calcium chloride in the well in order to sterilize it. Extra precautions taken during the American bombing raids and the floods, i.e., the use of impermeable lids on wells and the mandatory treatment of all drinking water, are credited with protecting the wells from chemical or bacterial contamination and the people from disease-causing organisms. Techniques and procedures are described and their effectiveness illustrated by means of tables describing the taste, colour, odour, and constituents of the water before and after treatment. (HC)

2407 Paterson, E.H., Tang, R.C. *Kwun Tong Community Health Project 1972-1976: progress report.* Contact (Geneva). 38. Apr 1977. 3-9. Engl.

See also entry 1000 (volume 2).

The Kwun Tong Community Health Project, Hong Kong, is a network of facilities and services designed to bring promotive health care to the city's 650 000 inhabitants. Since its inception in 1973, the project has established three community health centres and has identified three stages of operation. These stages are to gain credibility in a community, to educate the inhabitants, and to train and mobilize volunteer health workers. The final stage promises expanded personnel to offer first aid, to organize educational programmes, to take part in community development activities, to work in the local hospital, to promote health maintenance programmes, and to serve on advisory boards. By encouraging such participation, the project aims to demonstrate that health is not contingent on doctors and hospital beds and that health is the community's responsibility. (HC)

2408 Rifkin, S.B., ed(s). *Community health in Asia: a report on two workshops.* Singapore. Christian Conference of Asia. Jun 1977. 149p. Engl.

Individual chapters have been abstracted separately under entries 2385 and 2391.

Two workshops to encourage an exchange of ideas on community health were held in November 1976 and March 1977 and were attended by medical professionals, health planners, community workers, and village health workers from the Philippines, Indonesia, Sarawak, India, and Nepal. Participants viewed community health as a process whereby the community takes steps to meet its health needs rather than waiting to receive services from an external, centralized agency. This view permeates the workshops' record, which includes a discussion of the social, political, and economic factors surrounding a community's needs and resources; case studies of community health programmes; and a list of recommendations dealing mainly with future workshops, intercountry exchanges, and the provision of literature concerning community health programmes. (HC)

2409 **Schelven, C. van** Malawi, Ministry of Agriculture and Natural Resources. *Guide to health and good food for the family. 3 edition.* Lilongwe, Ministry of Agriculture and Natural Resources, Department of Extension and Training, Extension Aids Branch, Jun 1975. 58p. Engl. 25 refs.

This booklet, which was written by an FAO home economist for use by farm families, schools, and women's groups in Malawi, aims to help rural families keep healthy by following modern health practices and improving diets. Three of the four sections are presented in the form of simple questions and answers, grouped under the general headings of (1) providing good food for the family, (2) improvements in the home, and (3) keeping the family healthy. The fourth section contains 43 recipes that cover weaning dishes, packed meals for schoolchildren, and meals for invalids and old people, as well as the preparation of bread, cakes, biscuits, desserts, and preserves. Many suggestions for demonstrations, topics for talks to be given by health workers, and a list of books useful for community development also appear. Included in the illustrations of these sections are plans for a latrine, simple bathroom, and sun table and diagrams showing how malaria, hookworm, tapeworm, and schistosomiasis are spread. The value of breast-feeding and a balanced diet is stressed, as well as the importance of good personal hygiene, clean water, a tidy house, and a cleared yard. Regular attendance at under fives' clinics is advocated. (JT)

2410 **Shinoda, M. Wittermans, E.P. Kwok, T.W. Kuroda, Y. Gould, M. Fujioka, W., ed(s).** *Health and development in India: selected articles from the Indian periodical press.* Honolulu, Research Publications and Translations, Institute of Advanced Projects, East-West Center, Translation Series No.28, Apr 1968. 71p. Engl.

A number of articles that appeared in Hindu periodicals from March 1965 to November 1967 have been translated into English. They are grouped under three topics: public health in India, treatment and control of specific diseases, and the development of tribal India. Specific titles under the first topic include "National health scheme," "Welfare program for the blind in India," "Lakshmibai College of Physical Education," and "International cooperation in field of health"; the second topic includes "Indigenous medicines for various diseases," "Tuberculosis control in Madhya Pradesh," "Some problems of the lepers: a study," "New trends in the treatment of leprosy," "Story of the successful malaria-eradication project in India," and "Increase in medical facilities"; and the third, "Education and progress of the tribes," "The importance of cottage industries in the tribal areas," and "The contribution of poultry farming in solving the problem of food and development of the tribes." (HC)

2411 **Shochet, S.B.** *Health education in the prevention of gastroenteritis in infancy.* Family Physician (Tel Aviv), 4(8), 1974, 280. Engl.
International Workshop on Family Medicine, Herzliya, Israel, 20-29 Sep 1972.
For complete proceedings see entry 3433.

An investigation into the high infant mortality in the Little Triangle in Israel revealed that close to 50% of infant deaths in 1967 were due to gastroenteritis. Population in the study area was 25 000 Arabs. A sample of this group was interviewed and the resultant information indicated that the best way of attacking the problem was through education. A programme aimed at prevention was devised in such a way that the population at risk could identify with the methods used. It was hoped that this approach would motivate them to participate. Filmstrips were prepared from photographs of live situations and were shown to selected mothers. From the introduction of the programme in 1969 to 1971, the infant mortality dropped steadily and morbidity also fell. (Modified author abstract.)

2412 **Simmons, J., ed(s).** *Making health education work.* Washington, D.C., American Public Health Association, 1976. 154p. Engl.

This report was based on a series of workshops convened to analyze and discuss the goals, methods, and results of 17 health education programmes serving low-income and minority groups in the United States. It attempts an overall picture of health education – how principles have been applied in the past decade, ways of strengthening educational efforts, and deficiencies that prevent health education programmes from realizing their potential. The report treats time as a factor in building up the trust of a target population, consequences of early programme termination, relationships between health education and non-health issues, community participation and involvement, assistance from sources outside a community, etc. A brief description of each of the 17 programmes and a step-by-step guide to planning a programme are appended. (HC)

2413 **Simonds, S.K.** *Emergency challenges in health education.* International Journal of Health Education (Geneva), 19(4), Oct-Dec 1976, Suppl., 2-19. Engl. 56 refs.

Members of the health sector have universally recognized health education's role in comprehensive health care and have begun applying new knowledge of learning principles to the health field. At present, there are approximately 25 behaviour models that have been adapted to health education, representing a multiplicity of approaches to motivating people toward health-producing behaviour. Some models exploit the power of the peer group to motivate its members and to produce the phenomenon of self-help. Examples of successful applications can be found in the People's Republic of China, Cuba, Guatemala, India, Indonesia, Iran, Niger, Tanzania, and Venezuela. There are examples also in developed countries where the means for imparting health messages have expanded greatly in the past few years, extending more and more into the use of mass electronic media and modifying substantially the role of health educators. (AC)

2414 **Sowmini, C.N.** *Field study and demonstration in India.* International Journal of Health Education (Geneva), 8(3), Jul-Sep 1975, Suppl., 8-14. Engl.

Assisted by 14 community leaders, the medical personnel of a Madras (India) community centre conducted a venereal disease education programme for the local, at-risk population of 1 785 males and 1 884 females aged 15-50. Because the target group already had an elementary knowledge of venereal diseases, the programme stressed the positive image of the VD clinic and the need for early treatment, treatment of pregnant women, and examination of family members of infected patients. Educational efforts were concentrated on community leaders, the staff and frequenters of the community centre, clinic patients, and local health personnel who received intensive training so that they could extend their services to include home visiting. Educational methods included group talks and discussions, exhibitions, and dramatic presentations. The success of the programme has not yet been evaluated. (RMB)

2415 **Udry, J.R., Morris, N.M.** *Spoonful of sugar helps the medicine go down.* American Journal of Public Health (New York), 61(4), Apr 1971, 776-785. Engl. 27 refs.

Much research has been devoted to determining why some people refuse to participate in public health measures, but little has gone into discovering why anyone agrees to participate. The predominant feeling among health workers is that the nonconformer is recalcitrant and does not act in his own interests; close examination of the risks and benefits of public health measures, however, indicates the benefits to the individual do not outweigh the costs. For example, the risks in contracting smallpox in the USA are very slight and are much lower than the risks of dying from the vaccine. Still, some people do take advantage of public health services and a survey of a few of them indicates that they perceive public health measures as personally beneficial. This suggests that some health education methods are very convincing and, if they can be isolated through research, could greatly increase participation in public health measures. (AC)

2416 **Valdivia Dominguez, A.** *Stimulating community involvement through mass organizations in Cuba: the women's role.* International Journal of Health Education (Geneva), 20(1), Jan-Mar 1977, 57-60. Engl.

Since its inception in 1960, the Federation of Cuban Women (FMC) has worked to raise women's consciousness concerning health and hygiene. Today, the group fields more than 47 000 health brigades who promote health and sanitation. Each health brigade acts as a link between the FMC, the Ministry of Health, and a population of 300. The brigades meet monthly to discuss educational materials provided by the ministry and to organize preventive activities. Recently, they undertook an anti-tetanus campaign, vaccinating all groups at risk. Their parent organization and similar groups that promote community participation have enabled Cuba to attain many of its public health goals. (HC)

2417 **Wang, V.L.** *Health education and family planning in the People's Republic of China.* International Journal of Health Education (Geneva), 17(2), Apr-Jun 1974, Suppl., 1-24. Engl. 8 refs.

Health education and family planning promotion in the People's Republic of China are considered the responsibility of all members of society. Community participation in health affairs is assured by allowing the community to select medical students, by maintaining an "open-door" admissions policy that removes the traditional barriers between school and society, and by relying on volunteers extensively in sanitation programmes, schools, caring for the elderly, etc. Because of this community involvement, the family planning programme has been very successful. It rests on three principles: family planning education, readily accessible contraceptive devices and services, and the introduction of social pressures in favour of small families. Such pressures include encouragement of late marriage, education and persuasion through group discussion, public praise for individual acceptors, and loss of work points for absence from work for pregnancy and childbirth. (HC)

2418 **WHO, Brazzaville.** *Nutrition activities within the framework of basic health services.* **Brazzaville, WHO, 2 Oct 1972. 108p. Engl., Fren. Refs.**

Seminar on Nutrition Activities Within the Framework of Basic Health Services, Brazzaville, Congo, 19-24 Jun 1972.

This seminar sponsored by the WHO Regional Office for Africa focused on human nutritional requirements, health personnel training and roles in nutrition education, and the organization, administration, and coordination of nutrition activities. During discussions, participants suggested that breast-feeding, later supplemented by spoon-fed solids, should be encouraged in lieu of bottle-feeding; that working mothers should be given time away from their employment to

breast feed their infants; that health workers should inform mothers about the nutritious content of local foods and caution them against extensive use of condiments; and that agriculture and education ministries should cooperate with voluntary agencies and parents to establish school health surveillance programmes and garden and small stock-raising projects. Other recommendations included teaching health workers how to use the mass media; educating the public on the dangers of using alcohol, tobacco, and aerated beverages; passing legislation to control food advertising and to protect consumers against food adulteration, additives, and contamination; etc. Seminar papers on which discussions were based are appended. (HC)

2419 **WHO, Brazzaville.** *Evaluation of health education programmes.* Brazzaville, WHO, 11 Oct 1971. 127p. Engl.

Seminar on the Evaluation of Health Education Programmes, Brazzaville, Congo, 9-17 Jun 1971.

In 1971, the WHO Regional Office for Africa sponsored a seminar devoted to skills in planning, implementing, and evaluating community health education. The seminar activities consisted of group discussions of working papers and several small group workshops during which participants devised health education components for hypothetical programmes. Each of the programmes postulated special problems, for example, a malaria survey in eight villages that had refused to cooperate in previous surveys, a programme to vaccinate all pregnant women in an area where neonatal tetanus was prevalent and attributed to the devil, and a programme to improve environmental health in a village. The substance of discussions and proposals is recorded. (HC)

2420 **Yarnell, J.** *Evaluation of health education: the use of a model of preventive health behaviour.* Social Science and Medicine (Oxford), 10, Jul-Aug 1976, 393-398. Engl. 27 refs.

The use of mass media in a health edueation campaign was evaluated in this study conducted in Britain in 1973. The campaign aimed to promote measles vaccination and it utilized television, newspaper, radio, posters, and leaflets extolling the effectiveness of measles vaccination and the complications of the disease. The campaign was launched 2 weeks before a vaccination clinic was opened; parents known to have unvaccinated children were sent an invitation to attend the clinic and were given an appointment time. Samples of parents who responded and those who did not were interviewed to ascertain their attitudes toward the effectiveness of measles vaccination, their knowledge about the disease complications, and their reasons for attending or declining. Findings were that most of the parents recalled the announcements on television but had not been impressed appreciably by any other form of mass communication. The most effective tool in urging attendance, however, was the invitation – a finding that emphasizes the importance of personal attention in health education. (AC)

IV. Primary Health Manpower – Training and Utilization

IV.1 Primary Medical Care

IV.1.1 Professional

See also: 2122. 2128. 2131. 2133. 2139. 2140. 2149. 2155. 2181. 2185. 2218. 2248. 2256. 2271. 2310. 2327. 2328. 2465. 2491.2497. 2502. 2531. 2533. 2587. 2614. 2631

2421 **Baquero Angel. J.. Ferrer Ferrer. H.** *Educacion medica en el area rural: una experiencia en Colombia. (Medical education in the rural area: an experiment in Colombia).* Educacion Medica y Salud (Washington, D.C.). 9(1). 1975. 55-73. Span.

In 1969. the Medical School of the Universidad Javeriana in Bogota. Colombia. initiated a 10-week. rural hospital programme to train 6th-year medical students in public health and community medicine. The students' activities during this special course included consulting with patients in the hospital and associated health centres. providing emergency care. assisting in the operating and delivery rooms. studying the organization and administration of the hospital. helping with health education activities in the community. reporting on local standards of sanitation and environmental health. and carrying out a project in preventive or community medicine. The programme-related activities of the hospital directors and student supervisors are outlined. The authors feel that most of the objectives of the programme have been accomplished and that the course should be expanded to include students of other health disciplines. Suggestions made by participating students and directors are given. Statistical data concerning hours worked. hours devoted to different activities. participating hospitals. etc.. are included. (RMB)

2422 **Browne, S.G.** *Research in a "bush hospital" in Africa.* Tropical Doctor (London). 6(4). Oct 1976. 187-189. Engl. 14 refs.

The author comments that doctors in African bush hospitals have unique opportunities for research and observation-sharing and that they should follow 10 basic rules to capitalize on their experiences. These are to train others for routines such as history-taking. clinical screening. laboratory investigation. etc.: to keep comprehensive records; to learn the ranges of normal clinical presentations and recognize departures from them; to reevaluate established practices periodically: to observe preventive as well as urgent curative needs of patients; to remedy gaps in professional preparation; to read current medical literature; to observe and learn from everyone. including traditional practitioners. editors. colleagues. etc.: to maintain an inquiring mind. and to record and publish original findings or approaches. These rules are a byproduct of the author's 30 years experience in Africa during which he reported his work on trypanosomiasis. schistosomiasis. yaws. onchocerciasis, leprosy. and filariasis. (AC)

2423 **Carreon. G.G.** *Philippine General Hospital: a national training center for health professionals.* Philippine Journal of Nursing (Manila). 44(4). Oct-Dec 1975. 226-232. Engl.

The Philippine General Hospital has a mandate to provide medical services to the community. to train health professionals. and to engage in research activities. At present. the demand for medical services. which overbalances the facility's ability to meet it. is so great that it adversely affects the hospital's training and research. The result is that medical and other health students are heavily engaged in service. rather than learning. tasks. This means that their educational programme. which in 1974 was shortened and made more relevant. is less effective. Since 1974 the programme for interns and residents has included outpatient and community practice whereas earlier it was based solely on inpatient care. (AC)

2424 **Chinese Medical Journal. Peking.** *Revolution in health and education.* Chinese Medical Journal (Peking). 2(2). Mar 1976. 149-154. Engl.

The Chungking and Anhwei medical colleges in China operate open door schools in accordance with Mao Tse-tung's educational theories. These schools. conducted by teachers and medical students. train barefoot doctors. offer public lectures and education. and provide both preventive and curative care in the countryside. The teachers and students participate in productive labour along with the peasants and learn traditional herbal remedies from local practitioners. This combination of Western and traditional medicine, theory and practice. labour and learning. produces doctors prepared to work in the rural areas where they are so desperately needed. (ES)

2425 **Federacion Panamericana de Asociaciones de Facultades de Medicina, Cali, Colombia.** *Programa de ensenanza de medicina de la comunidad: documento base. (Program for teaching community medicine: groundwork document).* Rio de Janeiro, Federacion Panamericana de Asociaciones de Facultades de Medicina, 1973. 19p. Span.

At a 1971 conference, the Pan American Federation of Associations of Schools of Medicine established guidelines for a programme of university-based research projects designed to reorient medical education toward public health and community medicine. The objectives of the programme include: the involvement of medical schools and students with health services already existing in the community and the improvement of those services, the study and implementation of innovative techniques and types of health manpower, the participation of other health disciplines, and the revision of medical school curricula. The organization and operation of the programme are described. Appendix I contains a list of criteria that medical schools must follow in order to participate in the community medicine programme; appendix II outlines points that should be included in any project proposal, such as objectives, plan of action, available resources, and budget. (RMB)

2426 **Garcia-Silva, J.** WHO, Alexandria. *Teaching of maternal and child health and family planning in medical and nursing institutions of Latin America.* Alexandria, WHO, Feb 1973. 25p. Engl.
Group Meeting on the Teaching of MCH and Family Planning in Medical and Nursing Institutions, Alexandria, Egypt, 19-23 Feb 1973.
Unpublished document.

A review of the maternal child health problems and teaching in Latin America indicates that the high infant and maternal mortality are largely preventable but that medical school curricula are not geared to preparing students for work in maternal child health or preventive medicine. In fact, a survey of medical schools showed that no courses were actually devoted to maternal child health and that courses in gynaecology and obstetrics, preventive medicine, and pediatrics taken together totaled only an average 15.5% of medical teaching hours. Such figures underline the disparity in Latin America between health needs and medical education and accentuate the need for change. Some possibilities for change include defining maternal child health objectives in terms of professional behaviour as well as knowledge; linking objectives with content, methods, and evaluation in teaching; and designating preventive measures as the most important element in the teaching of health problem management. (AC)

2427 **Gunaratne, V.T.** *Challenge faced by the medical profession in tropical developing countries.* Tropical Doctor (London), 6(4), Oct 1976, 180-184. Engl.

The physician's roles in today's health care system are delineated and the deficiencies of modern medical education are examined. According to the author, at present medical education is preparing physicians for only one role, that of diagnosing and treating illness in the individual, instead of training them to diagnose and treat the community's ills, lead and coordinate the health team, and provide health education to patients and their communities. To promote these roles, medical education must be based on the needs of the people and not on a desire to improve disease technology; it must undergo a moral revolution to produce a professional who is intent not on dispensing drugs for symptoms but on promoting the well-being of the community. (AC)

2428 **Hospitals, Chicago.** *Hospital expands outreach program for populace of Ludhiana, India.* Hospitals (Chicago), 50(8), 16 Apr 1976, 75-79. Engl.

A training programme to acquaint student health workers with primary care in rural and deprived urban areas has been introduced at Brown Memorial Hospital, Ludhiana, India. Interns and nurses are assigned to health centres, subcentres, and outlying hospitals where they undertake home visiting, geographical surveys, etc. They emphasize maternal child health and family planning services. In the first 2 1/2 years of the programme, they have raised tetanus immunization levels for mothers from about 5% to 66%. This is significant because of the high neonatal mortality due to tetanus. (AC)

2429 **Hu, S.M., Seifman, E.** *Medical education in China.* American Journal of Chinese Medicine (Garden City, N.Y.), 4(3), Autumn 1976, 297-310. Engl.

This article concerns the changes in Chinese medical education that have taken place since the Cultural Revolution, specifically the relationship between political ideology and actual practice. It synthesizes the documentation that appeared in a series of articles devoted to a public discussion on the direction and emphasis in medical and health work published in *Renmin Ribao* (*People's Daily*), Peking, from December 8, 1968 to November 4, 1975. The major themes of the public discussion are: (a) medical and health work serving the masses; (b) insistence on the correct revolutionary lines; (c) combining theory with practice; (d) unity of traditional Chinese and Western medicine; (e) putting prevention first; and (f) emphasis on medical personnel retaining the characteristics of the working people. This is followed by a transcript prepared by the authors from a tape recording made during a visit to Zhongshan Medical College of Guangzhou (Canton) on November 5, 1974, describing the relationship between political ideology and actual practice in the field of contemporary Chinese medical education. (Author abstract.)

2430 **Josiah Macy, Jr. Foundation, New York. Bowers, J.Z., ed(s).** *Medical schools for the modern world: report of a Macy conference.* Baltimore,

Johns Hopkins Press, 1970. 257p. Engl.
International Macy Conference, How to Start a Medical School, Bellagio, Italy, 13-19 Oct 1968.

Founding fathers of 14 new medical schools in Africa, Asia, Latin America, and the United States outline the evaluation of their respective institutions, review the contributions of each to medical education, and discuss deficiencies. The influence of the major systems of (Western) medical education – the history of which is briefly traced in the introduction – on the developing countries is noted and the recent departures from the stifling traditions are lauded. These departures are evident in new curricula, new organizational patterns, and, particularly, new emphasis on community health and the prevention of disease. This last topic is the subject of a discussion and "facilities and construction" is the theme of another. (HC)

2431 Juricic, B., Cantuarias, R. *Salud rural en Chile: programa para atraer medicos a las zonas rurales. (Rural health in Chile: a programme to attract physicians to rural areas).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 78(3), Mar 1975, 203-211. Span.

In 1955, as an alternative to compulsory rural service, Chile's national health service introduced a new job classification, the "general zone doctor," designed to attract graduating physicians to rural practice on a voluntary basis. General zone doctors were eligible for merit points that would benefit them in later competitions for choice postings in city hospitals, for national health service positions in medium-sized hospitals after 3 years rural service, and for scholarships for specialty study. At first, Chilean medical students were reluctant to participate in the programme, with the result that only 5% of the graduating physicians in 1956 became general zone doctors, but this percentage had increased to 58.8 by 1972. As a result, the doctor/inhabitant ratio in rural areas rose from 5.4/10 000 to 6/10 000 in 15 years. Some 80% of the participating doctors interviewed in 1972 found their rural practice a valuable professional experience and the authors note that the participants' enthusiasm tended to increase with years of rural service. In 1973, the national health service initiated the classification of "general zone dentist," along the same lines as the medical programme, to alleviate the acute shortage of dentists in rural areas. (RMB)

2432 King George Medical College, Lucknow, India. *Note on training and research activities in the area of social sciences aspects of family health problems, and family health education undertaken by the upgraded Department of Social and Preventive Medicine, King George Medical College, Lucknow.* Lucknow, India, King George Medical College, n.d. 7p. Engl.
Unpublished document.

The Department of Social and Preventive Medicine in King George Medical College, Lucknow, India, has organized rural and urban field training and research opportunities for undergraduate and postgraduate students. The training programme emphasizes the behavioural and social sciences' contribution to family health; course work consists of lectures on theory, clinical demonstrations, a year's field-work during which the student provides care for two families (containing one newborn and one chronically ill person), and health education practice in a number of health centres. Both staff and students research the social aspects of family health and a number of the topics, complete with summaries of their findings, have been set forth. Papers published by members of the Department during 1971-1972 are listed. (HC)

2433 Kupat Holim, Tel Aviv. Polliack, M.R. Davies, B., ed(s). *Proceedings of the International Workshop on Family Medicine.* Tel Aviv, Family Physician, 4(8), 1974. 313p. Engl. Refs.
International Workshop on Family Medicine, Herzliya, Israel, 20-29 Sep 1972.
See also entries 2349, 2411, and 2511.

In 1972, Kupat Holim, the health insurance institution of Israel, and the Department of Family Medicine of the Tel Aviv Medical School held an international workshop on family medicine. Some 240 participants representing nine countries attended and more than 90 papers were presented. The conference format was group sessions followed by workshop discussions, covering education for family medicine, organization of primary medical care, mental health care, the role of the nurse as assistant to the physician in community clinics, the contribution of the social worker to a health care team, etc. The majority of papers are set forth as abstracts, but the longer papers include diagrams and references. (EE)

2434 Lesotho, Ministry of Health. Israel, Ministry of Foreign Affairs. *Summary report to the Minister of Health regarding the ophthalmology department established by the Government of Israel.* Jerusalem, Ministry of Foreign Affairs, 30 Nov 1976. 3p. Engl.
Unpublished document; see also entries 2365 and 2476.

A summary report of an ophthalmology department established in Lesotho by the Israeli government is set forth, functions of the department include provision of services through clinics, evaluation of a school for the blind, teaching and training for both physician and nursing staff, etc. From 1975-1976, the department managed 7 573 patient-visits and 847 operations. The physician-in-charge was provided by the Israeli government. (EE)

2435 Maddin, W.S. *Interpretation of traditional and modern medicine.* In Quinn, J.R., ed., China Medicine as We Saw It, Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(NIH) 75-684, 1974, 3-11. Engl. 13 refs.
See also entries 2154, 2193, 2260, and 2501.

Since the Cultural Revolution in the People's Republic of China, efforts to integrate Western and traditional medicine have proved overwhelmingly effective. They are most noteworthy in treatment, medical school curricula, health policymaking, and medical publishing. At the treatment level, departments of traditional medicine have been established in many of the hospitals, herbs traditionally used in treatment have been adopted alone or in combination with Western treatment, and research has been directed toward verifying the effectiveness of traditional treatment. Medical schools have introduced components of traditional medicine into their curricula and now require students to devote at least 40% of their study to it. In health policymaking, too, there have been changes that serve the cause of traditional medicine; these are based primarily on the makeup of decision-making committees, which comprise party line interpreters and representatives from every facet of health care, including consumers and maintenance workers. Finally, medical publications have incorporated articles on combined treatment and have concentrated on publishing studies of the effectiveness of traditional herbs. (AC)

2436 **Masawe, A.E., Samitz, M.H.** *Dermatology in Tanzania: a model for other developing countries.* International Journal of Dermatology (Philadelphia), 15(9), Nov 1976, 680-687. Engl.

Although figures from Tanzania suggest that skin problems in Africa account for 20-60% of all medical problems, no framework for delivery of dermatological care exists in any African country. At present, in fact, special training in dermatology is not undertaken in any medical school and the curricular time devoted to skin diseases is minimal for all categories of health worker. The reasons are multiple, including the effects of colonial influence, lack of statistical data, scarcity of proper treatment schedules and facilities, etc. If improvements are to be made, they will mean changes in traditions and a considerable investment of resources. A model for a dermatological care system that encompasses venereology, allergy and clinical immunology, dermatology, and leprology is suggested. It comprises four components: health personnel training, research, preventive and promotional services, and a network for consulting other health specialties. Immediate requirements include expansion of dermatology courses in the curricula of all health personnel, intensive production of specialists in dermatology, dissemination of teaching aids, and the establishment of a centre for training, research, and consultation. (AC)

2437 **Medical Journal of Australia, Sydney.** *International interdisciplinary educational workshop for students from the health professions.* Medical Journal of Australia (Sydney), 1(15), 19 Apr 1975, 515-516. Engl.

A 4-day workshop on health personnel education was held in September 1974 for and by a group of 38 students of medicine, pharmacy, nursing, and laboratory science from six Asian countries (Bangladesh, Hong Kong, Japan, Malaysia, Singapore, and Australia). The workshop was an expression of the students' concern that Asian medical education suffers from a rigid, authoritative approach; passive learning patterns; inflexible programming; and a lack of communication between health disciplines. The aim was to prepare students to confront their professors with rational and clear suggestions for solving the problems. At the workshop, small groups (7-8 members) practiced learning-by-doing techniques and studied the advantages of defining a course in terms of the skills it is meant to impart. They also covered audiovisual teaching methods, rural health care and team medicine, and student-teacher relationships. At the end of the workshop, students commented that they had developed their ideas, learned much about medical education, and learned even more about small group learning. The multidisciplinary nature of the workshop, especially, was held to be stimulating. (HC)

2438 **Migue, M.R.** *Paramedical education.* In Vogel, L.C., Muller, A.S., Odingo, R.S., Onyango, Z., and Geus, A.de, eds., Health and Disease in Kenya, Nairobi, East African Literature Bureau, 1974, 147-154. Engl.

For complete document see entry 2793.

Basic and postbasic training for paramedical personnel has been available in Kenya for some time; the courses reflect the different workers' job descriptions and are revised as duties change. Recently, course modifications were introduced for two categories of health worker, the clinical officer and the community nurse, who work together in rural health centres throughout the country. The clinical officer, who was previously known as medical assistant, functions as medical practitioner and team leader in a rural health centre and is the key health worker. At present, the clinical officer receives 3 years training but will soon receive an additional 6-month course in provincial health centres to prepare him for administrative decisions. The community nurse's training, which has always been multipurpose, now will include sufficient knowledge of diagnosis and treatment to allow him to undertake additional duties in the clinical officer's absence. Student selection criteria, course duration, examination, etc. of both basic and postbasic courses for these and other health workers are briefly set down. (HC)

2439 **Monekosso, G.L.** *Organization of an integrated medicine internship in tropical district hospitals.* Tropical Doctor (London), 7(2), Apr 1977, 76-80. Engl.

For the past 2 years, sixth-year medical students in Cameroon have been participating in a unique, 12-month, integrated internship programme designed and organized by the author: for 4 months they treat outpatients in a satellite rural health centre; for 1 month each they provide emergency care in hospital medical, surgical, pediatric, and obstetric departments; and for 4 months they practice general medicine in a district hospital in one of the country's seven provinces. In the district hospital, the intern assists the district medical officer in all aspects of his work – administrative,

technical, clinical, and public health – and compiles a report that includes a structural and functional description of the hospital plus a detailed description of 20 cases he has personally managed; the district officer, in turn, evaluates the intern according to his attendance, devotion to professional duty, competence, and team spirit. The author reports that response to the programme has so far been enthusiastic and optimistic and he strongly recommends it to other medical faculties and licencing authorities. (HC)

2440 **Mume, J.O.** WHO, Geneva. *Traditional doctor speaks.* World Health (Geneva), Oct 1976, 8-11. Engl.
See also entry 2268.

The author notes that international agencies, such as WHO, recognize the importance of traditional medicine in providing comprehensive, accessible health services in Third World countries. However, governments and the medical establishment suppress traditional practices on the grounds that they are not founded on scientific principles and are of superstitious origins. Given traditional medicine's long history of success in treating disease and accidental trauma and its emphasis on preventive as well as curative factors, it deserves consideration as the cultural expression of ancient healing techniques. Further scientific inquiry into the efficacy of traditional medicine would support its claim to a respected position in the health service structure and research of this nature would open communication between traditional and modern doctors. (ES)

2441 **Northrup, R.S., Rohde, J.E.** Rockefeller Foundation, New York. *Teaching community medicine: planning and executing a program.* New York, Rockefeller Foundation, 1975. Iv.(various pagings). Engl.

This paper discusses what a programme of community medicine should contain, how it should be presented, and who should teach it. Problems that have been encountered in previous community medicine programmes are identified and ways of overcoming them suggested. The importance of defining objectives and detailing a course plan is emphasized and examples are given. The authors note that there is a widespread attitude that community medicine is unsophisticated, frustrating, and boring, but they feel that it is a challenging field of medical research in which the physician has the opportunity to try out new approaches, to experiment with new techniques, and to reach a large number of people. (HC)

2442 **Oleinik, A.** Kupat Holim, Tel Aviv. *Training of health care teams in patient education within a health insurance institution.* Tel Aviv, General Federation of Labour, Kupat Holim, Division of Health Education. n.d. 9p. Engl.

The Kupat Holim Sick Fund (Israel) has long been aware of the need to train health care teams and personnel to treat and communicate effectively with the diverse language and ethnic groups in Israel. Thus, the Fund has created a health education division that offers training programmes for all levels of the health care team. Studies are based on social, behavioural, and communication sciences. At the postgraduate level, one course is devoted entirely to patient education and courses in related disciplines emphasize communication. In-service training for health care teams is also available and consists of 2-day regional workshops. Course content includes planning and organizing patient education in an outpatient setting, various teaching methods, systems of follow-up, and methods of evaluating behavioural change. Undergraduate training in patient education is part of the programme for medical and nursing students at Soroka Medical School (Beersheba). Students work in hospitals, outpatient clinics, and in the community and take responsibility for following up families during their 1st year. (EE)

2443 **Osuhor, P.C.** *Some aspects of community medicine in Nigeria.* Tropical Doctor (London), 7(2), Apr 1977, 92-95. Engl. 8 refs.

At Ahmadu Bello University, Nigeria, medical students enter a 5-year course designed to prepare them to manage a hospital and extend their services into the community. Their first year of study is devoted to statistical methods and vital statistics, medical sociology, demography, social anthropology, and human ecology. During the second year, they study environmental health and sanitation, water supply, nutrition, and health education; in the third year, epidemiology is the main subject. The fourth year focuses on maternal child health and social pediatrics and the first field training, a 2-week rural posting, is undertaken. More field training (7 weeks) is compulsory during the last year of study and students participate in projects that widen their understanding of community practice, health management and planning, organization and administration of health services, community dentistry, etc. Other courses offered by the university include dispensary assistant, health inspector, and health assistant. These are described briefly. (AC)

2444 **Prasad, B.G., Bhatnagar, J.K.** *Teaching of community health in hospital and health centre complex at the K.G. Medical College, Lucknow.* Indian Journal of Preventive and Social Medicine (Varanasi, India), 3, Mar 1972, 23-28. Engl. 8 refs.

The community health course at King George Medical College, Lucknow, India, examines the relationship between disease and the environment and emphasizes the value of continuity in health care. The departments of social and preventive medicine, pediatrics, and obstetrics and gynaecology participate in the teaching, while a hospital and a health centre complex comprising both urban and rural components provide practice settings. In the hospital, students undertake clinical duties, attend neonatal clinics, and question patients to ascertain their medicosocial history (under the guidance of a medical social worker). In the pediatric wards, students treat illnesses and analyze measures necessary to prevent reoccurrences. At the health centre

complex, interns examine and treat patients, visit families, record clinical and social histories and follow-up, and interview three families each for a sociomedical survey. (HC)

2445 **Prywes, M.** *To teach is to serve: a new approach to medical education and care.* Kidma: Israel Journal of Development (Jerusalem), 1(2), 1973, 1-4. Engl.

An experiment in physician education has been launched in the Negev (Israel) through the establishment of the Regional University Centre for Health Sciences. The centre has two objectives: to integrate all health services in the region through better use of organizational, financial, and manpower resources and to merge this system with medical education so that newly trained physicians will be aware of the needs of the community and want to work in hospitals and primary care clinics. The centre serves nearly 300 000 rural inhabitants, including some 30 000 nomadic Bedouins. The new system embraces all officers of health agencies and hospitals in the region and provides links between them; for instance, hospital physicians serve on a rotating basis in community clinics where they can advise and aid general practitioners. At present, a special programme in teaching methods for community physicians is being designed and the centre is planning degree courses in health administration, health economics, nursing, and allied health professions. (EE)

2446 **Radford, A.J.** *Community health in practice for a developing country.* ICTM Newsletter (Hamilton, Bermuda), 8, Mar 1970, 3. Engl. 8 refs.
ICTM: International College of Tropical Medicine.

Physicians in Papua New Guinea are trained to take an ecological view of health and disease. Their 5-year undergraduate curriculum includes social sciences, epidemiology, and community health. These subjects are complemented by the students' field research, participation in a medical patrol, rural in-service training, and a 2-year internship through which graduates become accustomed to working with other members of the health team. When the graduates enter practice they will rely extensively on middle-level health auxiliaries such as the health extension officers. These field-workers are trained to serve populations of 10 000-15 000 people and provide them with basic health services, disease control, environmental sanitation, maternal/child and school health services, etc. (HC)

2447 **Roemer, M.I., Abad Gomez, H.** Pan American Health Organization, Washington, D.C. *Instruction on medical care organization in the basic M.P.H. curriculum of Latin American schools of public health.* In Boletin de la Oficina Sanitaria Panamericana: English Edition Selections from 1968, Washington, D.C., PAHO, 1969, 18-29. Engl.
Also appeared in Spanish in Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 64(3), Mar 1968, 204-218.

A survey of curricula in nine Latin American schools of public health located in Argentina, Brazil, Colombia, Chile, Mexico, Peru, Puerto Rico, and Venezuela was undertaken in 1964 and 1967; it revealed that all nine schools offered some instruction in hospital administration and medical care organization. Information was obtained through visits and correspondence. Other findings were that instruction in hospital administration averaged 47 hours per year and in medical care organization it averaged 29 hours per year; that the course content in hospital administration varied less from school to school than did that for medical care organization; and that teaching material – in the form of textbooks in Spanish and statistical data on medical care resources, utilization, and costs – for the courses on medical care organization were in short supply. An outline of topics for courses in medical care organization is appended as a guide; it includes the burden of sickness; the costs of medical care; medical care resources; conceptual analysis of the organization of programmes; medical care through charity, government, industry, social security, health insurance, etc.; administrative problems in medical care; planning of medical care systems; and international comparisons in medical care organization. (HC)

2448 **Santas, A.A.** Federacion Panamericana de Asociaciones de Facultades de Medicina, Cali, Colombia. *Programa de ensenanza de medicina de la comunidad: conceptualizacion. (Teaching programme for community medicine: rationale).* Cali, Colombia, Federacion Panamericana de Asociaciones de Facultades de Medicina, 1973. 15p. Span.
Unpublished document.

After defining the community in geographic terms, the author states that the hospital should be the centre of all programmes in community medicine, as well as all training relating to other public health matters such as sanitation, disease control, etc. In his opinion, community health projects for students should be multidisciplinary and organized according to these principles: the ultimate objective of the project should be to teach, the project should be considered an extension of the university, all aspects and personnel of the project should be imbued with the spirit of public service. the project leaders and teachers must be carefully chosen, immediate and spectacular results are not to be expected on any level, the content of the project should reflect the actual conditions of the community, the project should be constantly evaluated. and the personnel of one project should be prepared to cooperate with those of another. If these principles are followed, the author feels that such teaching projects in community medicine can contribute greatly to social progress. (RMB)

2449 **Thacker, S.B., Banta, H.D.** *National service in rural areas: the case of Colombia.* PAHO Bulletin (Washington, D.C.), 10(2), 1976, 156-162. Engl. 15 refs.

Although many countries now require medical graduates to practice in rural areas to gain licensure, the effects of compulsory practice programmes on the health status of rural populations vary widely. In Colombia, for instance, where interns are required to spend a year in rural practice, the effect has been negligible; however, Kenya's rural internship has proved more successful. The difference is training. Whereas Kenya has linked desired outcomes with training opportunities, Colombia has opted primarily for traditional medical education. The result is that Kenya's interns, who have undertaken job-related tasks in medical training, are prepared for community health work, epidemiology, and health team supervision, as well as clinical activities. Colombia's interns, on the other hand, are prepared solely to treat medical problems. Thus, their impact on health has been minimal; future gains will be dependent on changes in medical education to reflect accurately the interns' job description. (AC)

2450 **Thakore, V.H., Contractor, A.A.** *Experiences in establishment of rural health centres for the training of medical interns.* Indian Journal of Preventive and Social Medicine (Varanasi, India), 3, Jun 1972, 172-175. Engl.

A scheme to make rural internship in India more responsive to the needs of the intern and the rural populations was drawn up in 1962. Investigation into the existing system had indicated that interns in the rural health training centre, Bavla, were not getting a chance to practice medicine; the population around the centre was disgruntled because of the many surveys; and the programme concepts of integrated approach, team experience, and rural bias were not being actualized. The new scheme sought to introduce rural health units that would provide villagers with free service and medicine in exchange for accommodation. At first, the villagers feared the interns would be learning at their expense and the local practitioners were afraid that they would lose business. In 1964, however, the first unit was requested and established. On the basis of its success, four others were launched. Each unit serves a population of 10 000 and the interns' services are supplemented by those of visiting specialists. After 8 years operation, public interest in the programme was high and the interns were well received. Recommendations are for more frequent visits from specialists and increased supervision. (HC)

2451 **Tudge, C.** *Biggest laboratory in the world.* World Medicine (London), 12(15), 4 May 1977, 17-20,23-24. Engl.

Two of Israel's four medical schools reflect the country's contrasting attitude toward technology. The Technion Medical School in Haifa, focusing on research, is committed to the belief that the physician's future lies in medical technology. In contrast to Technion is the Ben-Gurion University Medical School, Negev Center for the Health Sciences, which sees the physician's future in human understanding and behaviour. The latter aims to train a different kind of doctor by assessing candidates for such intangible qualities as compassion and selflessness. The Negev's 6-year curriculum emphasizes the clinical and practical aspects of medicine and even the medical school faculty undertake service tasks as health team members who are not confined to their laboratories and desks. Though Ben-Gurion and Technion are vastly different, they both respond to urgent environmental and military problems with innovative practical research programmes; Technion has launched programmes in desert survival methods, artifical limbs, and a mobile heart beat detector, whereas the Negev has initiated novel water and agricultural technologies and has served, by its location and buildings, as an experiment in desert living. (LB)

2452 **WHO, Geneva.** *Planning of medical education programmes; report of a WHO expert committee.* Geneva, WHO Technical Report Series No.547, 1974. 25p. Engl.

Also published in French, Russian, and Spanish.

A WHO expert committee met to draw up guidelines for planning medical education. In preparation, the members had been asked to consider factors that should influence medical education policy; the role of graduates; formulation of policies that suit economic determinants, national health policy, academic determinants; and community involvement. The committee discussed selection, counseling, and career guidance; economic incentives for medical graduates; and the importance of cooperation between government and medical faculties in the production of relevant curricula. They identified major impediments to national planning, which include lack of accurate data about health and health manpower, lack of proper display of existing data, lack of means to assess health care priorities, and lack of a framework for correlating health problems with what is taught. Based on their discussions, they recommended guidelines that included determining a country's major health problems and needs based on a health profile of the society to be served and an investigation of the society's perception of its health problems; deciding present and future medical school policy on the basis of consultations with appropriate university officials, practicing professionals, national ministries, and the population to be served; analyzing tasks and formulating job descriptions of health workers; directing manpower to needed careers by provision of economic incentives and relevant learning experiences; etc. (AC)

IV.1.2 Nonprofessional

See also: 2104, 2122, 2125, 2128, 2132, 2155, 2171, 2174, 2181, 2185, 2188, 2192, 2254, 2256, 2271, 2276, 2310, 2340, 2357,2363, 2364, 2366, 2371, 2374, 2379, 2385, 2397, 2423, 2424, 2429, 2436, 2443, 2446, 2502, 2543, 2558, 2574, 2577, 2582, 2583, 2597, 2599, 2600, 2605, 2608, 2611, 2613, 2616, 2623, 2625, 2634, 2638, 2646, 2660, 2739

2453 **Backett, E.M., England, R.** *How barefoot? Next steps for the medical auxiliary.* Lancet (London), 2(7945), 6 Dec 1975, 1137-1138. Engl. Refs.

For several years, the deployment of medical auxiliaries has been proclaimed as the answer to health personnel shortages everywhere and, having accepted the premise, many governments and agencies have set about ineffectually deploying the medical auxiliary, disregarding the tools for evaluating and improving his performance. They equip him with placebos, expectorants, and balms and train him in methods to prevent illness but not to treat or cure it. Thus, they effectively limit his status and credibility as a health worker and, though his services are inexpensive, they are not utilized by the population. These are but a few of the reasons the medical auxiliary has not made the impact on health that was forecast. Some of the reasons have not yet surfaced and they will not do so until they are investigated actively through systematic trials. The role of the medical auxiliary in each setting must be reevaluated and expanded under controlled conditions. (AC)

2454 **Banks, E.R.** *Community health: water.* In Cruikshank, R., Standard, K.L., Goldthorpe, G., Cook, R., eds., Manual for Community Health Workers, Mona, Jamaica, University of West Indies, Department of Social and Preventive Medicine, 1968, 98-102. Engl.
See also entries 569 (volume 1), 2455, 2558, 2582, 2583, 2597, and 2634.

The training of community health workers in Jamaica includes a course on the sources, properties, and purification of water; the notes for the course observe that water from rain, rivers, springs, and wells often contains organic and mineral impurities that cause disease. Boiling, distillation, filtration, and chemical treatment will purify water on a small, domestic scale, but a community must remove major pollution through the construction of storage reservoirs, sand filtration beds, or mechanical filters, or by the introduction of a chemical such as chlorine or lime into the water source. These methods and results are described in detail. (ES)

2455 **Banks, E.R.** *Community health: inspection of a restaurant.* In Cruikshank, R., Standard, K.L., Goldthorpe, G., Cook, R., eds., Manual for Community Health Workers, Mona, Jamaica, University of West Indies, Department of Social and Preventive Medicine, 1968, 103-105. Engl.
See also entries 569 (volume 1), 2454, 2558, 2582, 2583, 2597, and 2634.

Restaurant inspection is an important public health aspect of the training of community health workers in Jamaica. Because of the danger of communicable diseases, such public facilities must observe stringent building, sanitation, and hygienic codes, especially in rural areas. These codes cover construction materials; light, ventilation, and sanitary conveniences; storage equipment made of materials which are dust, insect, and rat proof; water supply; refuse collection; proper drainage; and the good health and hygiene of the employees and the premises. (ES)

2456 **Bartos, O., Osanec, F.** *K nekterym otazkam ulohy zakladnich zdravotnickych sluzeb v rozvojovych zemich. (Various problems in the role of basic health services in developing countries).* Ceskoslovenske Zdravotnictvi (Prague), 23(6), 1975, 218-221. Russ.

In the introduction, the authors draw attention to basic factors that influence health conditions in developing countries and in conjunction with this they define the key position of primary health services. They emphasize the importance of medical assistants and their role and status are the subject of part 2 of the paper. (Journal abstract.)

2457 **Bennett, J.** Papua New Guinea, Department of Public Health. *Proposed syllabus aid post orderly (A.P.O.).* Port Moresby, Department of Public Health, Jan 1972. 11p. Engl.
Unpublished document.

A proposed aid post orderly syllabus to be offered in Papua New Guinea is set forth; the course will be open to those 17 years and older who have completed Standard 6 education and can understand, speak, and write Pidgin and English. Training will consist of 1 year of formal study and 1 year of closely supervised practice (under guidance) in the student's home district hospital, health centre, and aid post. Procedures that must be adequately performed, recorded in the student's procedure book, and checked by a supervisor are listed and the course content, method of delivery, and expected outcome are presented. Training goals are listed for the role of the aid post orderly: elementary human biology, nursing and medical procedures, recognition and management of common diseases in Papua New Guinea, disease prevention, health education, national health programmes (malaria, tuberculosis, leprosy, etc.), administration, local government councils, and "patrolling" or health tours. Students will be evaluated by means of their procedures book, their clinical tutors' assessment, fortnightly tests, practical tests every 3 months, and a final examination conducted by an outside examiner. (HC)

2458 **Berthet, E.** *Recyclage du personnel de sante dans les pays en developpement. (Upgrading and coordinating the efforts of health personnel in developing countries).* Carnets de l'Enfance (Paris), 23, Jul-Sep 1973, 76-86. Fren.

Between 1950 and 1972, the International Childhood Centre sponsored 340 education courses for the health personnel of 62 developing countries. The courses examined the use of new medical equipment; provided a world view of the health problems of mothers, infants, and adolescents; presented new, efficient work methods; broadened the health worker's contacts with teachers, social workers, and government officials; and encouraged future continuing education programmes among the workers themselves. The 2-week sessions

were usually attended by 25-40 people, including midwives, nurse auxiliaries, social workers, and community health workers. Led by a team of experts from the centre, the sessions included lectures, discussions, and practical exercises of new medical and educational techniques and information. Family health subjects ranged from family planning, nutrition, and hygiene to sanitation and communicable disease prevention. The sessions stressed the importance of the integration of health with other social and government services and follow-up has included providing participants with relevant publications and a newsletter. (ES)

2459 **Black, D.P., Riddle, R.J., Sampson, E.** *Pilot project: the family practice nurse in a Newfoundland rural area.* Canadian Medical Association Journal (Ottawa), 114(10), 22 May 1976, 945-947. Engl.

An experimental programme for the employment of nurse practitioners is being tested in two rural villages in Newfoundland (Canada). It is serving approximately 2 500 inhabitants who are located 32 km by unpaved road from the nearest health centre and hospital. The villagers helped plan the programme and provided a converted classroom that serves as a base for the nurse practitioner. The nurse monitors treatment of persons with chronic conditions; assesses patients with medical problems, treats those within her field of competence, and refers others to the health centres; assists families to care for the ill and elderly in their homes; and manages immunization programmes, well-baby clinics, health education, and school health activities. She keeps up-to-date by working 2 days per week in the health centre or hospital. The project is still being evaluated, but medical staff and consumers in the area feel the nurse practitioner has not only saved the doctor many routine visits but has also improved the quality of health care in the two communities. (HC)

2460 **Chinese Medical Journal, Peking.** *Advance along the widening road pointed out by Chairman Mao: a report on the barefoot doctors of Chiangchen Commune, Ch'uansha County, Shanghai.* Chinese Medical Journal (Peking), 1(3), May 1975, 159-166. Engl.

This review of the accomplishments of barefoot doctors in China discusses how the cadre has evolved and how it has resisted tendencies to deviate from the directives set down by Chairman Mao in 1968. These directives were: to concentrate on rural areas, to emphasize prevention over cure, to combine theory with practice, and to integrate Western with traditional Chinese medicine. The tendency of some doctors to favour curative over preventive medicine is countered through discussion, criticism, and reeducation, generally during the three of four annual barefoot doctor study classes when examples of correct behaviour are put forward for evaluation. One such example is that of two barefoot doctors who, in accordance with the directive to put prevention first, spent 3 years collecting data later used to create a rice field management system that increases production and facilitates mosquito extermination. Numerous other examples are cited to illustrate the impetus of ideological orientation. (HC)

2461 **Ethiopia, Ministry of Public Health.** *Advanced dresser curriculum as revised by a special committee.* Addis Ababa, Ministry of Public Health, Oct 1966, 6p. Engl.
Unpublished document; see also entries 2462, 2515, 2516, 2517, 2598, 2599, and 2600.

The 1-year advanced dresser course in Ethiopia aims to train elementary dressers (auxiliary health workers) in the care of acutely ill patients; supervision of auxiliaries; management of a hospital ward, school clinic, or general clinic; and provision of health education. It also seeks to foster a sense of pride in the work and responsibility to the community. The first 6 months of the course is standard for all advanced dressers and includes instruction in English (particularly medical terminology), ethics, pharmacology, nutritional deficiencies and diet therapy, recognition and treatment of common diseases, emergency surgery, interviewing techniques and introductory diagnosis, laboratory techniques, clinical nursing, ward management and housekeeping, preventive medicine, community sanitation, health education, and clinic management. The last 6 months consists of practical training in one of three areas of specialization: inpatient care, public health, or school health. The content of each subject is outlined, the number of hours to be devoted to each is indicated, and some instructors' guidelines are included. (HC)

2462 **Ethiopia, Ministry of Public Health.** *Standards for dresser school.* Addis Ababa, Ministry of Public Health, May 1960, 3p. Engl.
Unpublished document; see also entries 2461, 2515, 2516, 2517, 2598, 2599, and 2600.

The staff, clinical facilities, and teaching facilities required to operate a school for dressers (auxiliary health workers) in Ethiopia are enumerated and a number of instructions are given about practical assignments, admission requirements, curricular requirements, records, and clinical practice. Hospitals that are eligible to train dressers must have one physician and two nurses willing and able to devote time to the programme, a daily inpatient census of at least 20, an active outpatient department or clinic, X-ray facilities, a modest laboratory, a well-lighted classroom, a demonstration area, teaching materials, and textbooks (three titles are mentioned). Trainees are to be treated as students and not employees, i.e., their practical assignments must be based on training needs; students' physical examinations and medical care must be provided by the school; an individual record, including the results of physical examination and evaluation of progress, must be kept for each student; each student must be given practical experience in all departments of the hospital; clinical practice hours should total no more than 48 per week; night duty is compulsory but must not exceed 8 weeks per year; etc. Detailed curricula for both elementary

and advanced dressers are available from the Ethiopian Ministry of Public Health. (HC)

2463 **Farman, M., Shafaie, A.R.** *Report on medical education and health care coverage for rural areas in Iran.* Tehran, Institute for Scientific and Educational Research and Planning, Sep 1973. 1v.(unpaged). Parsi. Refs.

This in-depth study was undertaken to alert Iranian officials to the acute shortage of medical and paramedical staff in rural areas. It collates statistical data on population growth, medical education, and geographic distribution of personnel and illustrates the reasons why rural life does not attract physicians. Building a case for the deployment of auxiliaries, it suggests that talented young villagers be trained for 2-4 years at government expense and presents specific recommendations for their training and deployment. The report is organized into chapters on analysis of health care in the country, 1962-1971; analysis of health care in five selected cities; medical training in the country; reasons for unbalanced distribution of medical doctors in the country; measures for securing medical and health care for rural areas; and a plan for a new rural medical education. (HC)

2464 **Fendall, N.R.** Population Council, New York. *Partnership in medicine.* International Congress on Tropical Medicine and Malaria, Abstracts and Reviews, 1968, 1025-1037. Engl.
Eighth International Congress on Tropical Medicine and Malaria, Teheran, Iran, 7-15 Sep 1968.

If health planners truly want to keep the cost of medical care as low as possible, they must not waste resources by employing experts to treat minor ills; instead they must select, train, and deploy auxiliaries to screen and refer patients, to treat common illnesses, to manage environmental improvements and normal maternal child care, and to administer emergency medical care. Basic training for auxiliaries should vary with the students' educational background and with needed skills but should range from 1-3 years. Trainees should be selected for their reliability, diligence, vocational attitudes, and aptitude and should be provided with ample opportunities for career advancement. Although auxiliaries may be employed either as assistants to more qualified personnel or as substitutes for them, the latter role requires extended field experience and upgraded training. (AC)

2465 **Hawley, T.G.** *Medical education in the South Pacific.* New Zealand Medical Journal (Wellington), 81(533), 12 Feb 1975, 126-128. Engl.

Since its inception in 1885, the Fiji School of Medicine has been characterized by its pragmatic approach to medical education. The school began with a 3-year course to train native medical practitioners and over the years has increased the status and length of training to keep up with improvements in general education at the entrance level. When general education in Fiji outstripped that in other parts of the South Pacific, special classes were set up to enable regional students, who comprise one-half of the school's student body, to meet entrance requirements. Staffing patterns have similarly been determined by circumstances: prior to 1928, training was the responsibility of the Suva hospital staff. The introduction of the first full-time staff member in 1928 was not followed by a second until 1951 and, although full-time staff members have increased rapidly since then, the school still relies on the hospital for teachers of specialties such as anaesthesia, ophthalmology, radiology, etc. Possible future directions have been indicated by the Irving Report, which recommends that the school become the School of Health Sciences of the University of the South Pacific (USP), that the course by extended to 6 years, that a 2-year conversion course be set up to allow recent diploma holders to become degree holders, and that a 3-year health officer course be developed to train primary health workers. Implementation of this report will depend on the availability of funds and the decision taken by the USP. (HC)

2466 **Heggenhougen, K.** *Health care at the "Edge of the World": Indian campesinos as health workers in the Guatemalan highlands.* New York, New School for Social Research, 1974. 45p. Engl. 104 refs.
Forty-first International Congress of Americanists, Medical Anthropological Symposium, Mexico City, Mexico, 2-7 Sep 1974.
See also entries 757 (volume 1) and 1745 (volume 3).

An anthropologist who observed the cultural context and the effectiveness of the Behrhorst rural health promoter programme in Guatemala found that the programme had helped to demystify modern medicine by training unschooled but bright local people to meet the primary health care needs of the locality. According to the author, the Indians participating in the programme had been cut off from most Western medicine not only by their geographical isolation and poverty but also by their deep suspicion of the dominant *ladino* national culture. Now, due to the efforts of the Behrhorst programme, they can manage many of their own health problems. A field study of one village participating in the programme suggested that the health promoter in the village was well accepted and effective in his curative work but that he devoted less time to preventive medicine than was promoted by the programme. This finding and others underlie author suggestions for strengthening the organization and supporting the promoters who are likely to have problems identifying with their community once they have been exposed to the outside world. (AB)

2467 **Hirschhorn, N., Lamstein, J.H., O'Connor, R.W., Kesterton, A.** *Logical flow charts to train and guide health auxiliaries in the treatment of children's diarrhoea.* Tropical Doctor (London), 6(1), Jan 1976, 33-36. Engl. 13 refs.

A flowchart – also called decision tree, clinical algorithm, or protocol – for the treatment of acute diarrhea in children is presented as a simple, effective standard

guide to rehydration. It also serves as an example of flowcharting and as a model for outlining the treatment of other conditions. Separate symbols distinguish between steps that seek information and those that give instructions: six-sided boxes (decision boxes) contain questions about the patient, rectangles contain treatments that correspond to different answers, ellipses indicate an emergency action is necessary, and circles denote the last step of each chart. The flowchart for the treatment of diarrhea in children is reproduced in full and accompanied by detailed explanation. (HC)

2468 **Hurd, J.M., Hopps, N.S., Wiebe, L.** *Manitoba community health worker: a new concept in primary care.* Winnipeg, Man., Department of Health and Social Development, 8 Mar 1976. 1v.(various pagings). Engl.
Unpublished document.

A study was conducted in Manitoba, Canada, to determine whether the community health worker's training is relevant to common community health problems, whether she perceives herself as able to manage these health problems, how she performs, whether the community utilizes her services, and what impact she has made on the community's health. An analysis of her duties and an examination of her medical log were used as a base for identifying common community health problems and community health worker utilization rates; a grade on a five-point scale indicated the worker's ability/performance in her own, her trainer's, and her supervisor's eyes. The study revealed that the training curriculum, in both content and time, closely matched the working day of the community health worker; the trainees saw themselves as "excellent" or "very good" at dealing with common community health problems at graduation; trainers and supervisors regarded 8 out of 10 trainees as competent health workers, 1 as fair, and 1 as poor; utilization of the community health worker tended to increase with her training and experience; and, although incidence of common illnesses did not change substantially, illness complications were fewer. Questionnaires used in the study are appended. (HC)

2469 **Jannarkar, A.R., Shah, P.M.** *Part-time village level health workers — "barefoot doctors" — at health unit, Palghar.* New Delhi, Coordinating Agency for Health Planning, CAHP No.201, n.d. 9p. Engl. 8 refs.
Unpublished document.

In 1972, a programme to promote the health of children under 5 through coordinated community care was started at a health unit in Palghar, India. As part of the programme, local middle-aged mothers with leadership qualities were recruited as part-time health workers to provide an interface between the health services and the villagers and to promote preventive medicine. In a 3-week training course they learned how to weigh children, measure their heights, ascertain birth dates using a local events calendar, and teach other mothers about nutrition. In addition, they were introduced to the basics of personal hygiene, common communicable diseases and nutritional conditions found in children, immunization, growth and development, and family planning. Each worker then looked after the health of the children under 5 in a population of 2 500-3 000, monitoring their growth, identifying those requiring special care, conducting clinics, organizing immunization campaigns, etc. At the end of 9 months operation, the community exhibited some confidence in the workers and the nutrition, growth, morbidity, and mortality statistics reflected the improved health status. The possibility of extending the women's activities to include antenatal and postpartum care was being considered. (HC)

2470 **Jara, M.B.** *"Barefoot doctors" finally come of age.* Manila, DEPTHnews, No.258, 26 Oct 1974. 5p. Engl.
Unpublished document.

Medical assistants, under a variety of names, form the backbone of rural health services in many developed and developing countries. This brief international survey of their different titles and functions ends with a detailed description of an economical health programme in Rizal (Philippines), where 56 primary care clinics, staffed by nurse-midwives trained in public health, provide antenatal, child health, immunization, health education, family planning, first-aid, and referral services for an isolated rural population. (RMB)

2471 **Kottegoda, S.R.** University of Sri Lanka, Colombo. *Sri Lanka: new course for assistant medical practitioners (AMPs).* Colombo, University of Sri Lanka, Ceylon Medical College Council, n.d. 1p. Engl.
Unpublished document.

Sri Lanka's training programme for assistant medical practitioners consists of courses offered at medical school faculties. Students are rural inhabitants who will return to their communities to work after completing the 3-year course. Thirty students are admitted each year and the first group completes training in 1977. The courses, which are taught in English, include clinical practice in the teaching hospital. They aim to prepare the practitioner to undertake preventive health measures and community health education, to implement family planning programmes, to diagnose and treat common conditions, to refer serious problems to the hospital, to conduct normal deliveries, to manage the local health post, and to work effectively in the health team. (ES)

2472 **Li, V.H.** *Politics and health care in China: the barefoot doctors.* Stanford Law Review (Stanford, Cal.), 27, Feb 1975, 827-840. Engl. 25 refs.

In 25 years, the People's Republic of China has created a health care system whose standards of care have been compared with those of the United States by concentrating its scanty resources on labour-intensive methods of preventive medicine. One million barefoot doctors with 2 months to 2 years of medical training form the backbone of this system. Details of the 6-month barefoot doctor training course at the Shenyang School of

Public Health are given and tables list the tasks that graduates feel they are qualified to perform versus those the school faculty think can be carried out by barefoot doctors. Training costs, which are financed by the state, are kept down by spreading training over a period of several years. Students are selected by the community, which also participates in policy formulation and mass campaigns. Graduates receive the same salary as other health workers and continue to take part in commune agricultural activities. The effect of community interaction is that elitist attitudes are nonexistent and ties with the people are strong. The author compares the community's participation in the health system with its role in the legal system, where the burden of work is also borne by minimally trained nonprofessionals. (RMB)

2473 Logan, M.L. *"Katiwala": trustee of community health.* Initiatives in Population (Makati, Philippines), 2(1), Mar 1976, 36-42. Engl.

An experimental programme in the Philippines has extended health services to impoverished rural and urban populations. In 1972, the staff of a cooperative health centre initiated a training programme for community workers so that they could make immediate health care available to all the health centre's members. Training has been based on the dialogue teaching methods of Paolo Fraire's *Pedagogy of the Oppressed.* Classroom instruction, which takes the form of verbal interactions between student and teacher, practice, and review, covers concepts of basic creative and preventive medicine and is held once a week for 6 months. After completing training, the *katiwala*, or worker, returns to her community and provides care for minor injuries and common illnesses; administers BCG vaccinations; offers pre- and postnatal care and supervises normal childbirth; and gives educational and motivational instructions in family planning, environmental sanitation, nutrition, and mother and child care. The *katiwala* also maintains medical records and collects vital statistics and twice a week she returns to the centre to assist in well-baby clinics, obstetrical examinations, and laboratory work. A health centre staff member meets with her bimonthly to discuss problems and assess her performance. Remuneration is linked to productivity; it includes a salary, a stipend for statistics collection, and incentives for giving immunizations and building sanitary toilets. (ES)

2474 Lopez Hernandez, C.A. *Estudio preliminar sobre radio comunicacion con estudiantes. (Preliminary study of radio communication with students).* Quirigua, Guatemala, Instituto de Adiestramiento de Personal en Salud, 1975. 31p. Span.

In 1974, the Institute of Health Personnel Training (Quirigua, Guatemala) installed transistorized radiotelephones in seven rural villages, known as outposts, and used radio communications to supervise in-service training for student rural health technicians. For 2 months, the students reported to the institute every weekday morning and remained on the air for consultations as necessary; the central receiver was switched on for most of the day to handle emergency calls. The frequency, number, content, etc., of the students' calls were recorded on forms that are set forth and, from the information gathered the author, an agricultural consultant who worked with the institute's supervisory group of medical personnel, concludes that the availability of a radio tended to improve the quality of medical care given to the outpost villagers. Also, students reported that the radios made them keenly aware of their role as members of a health team, although they were reluctant to leave their radios even to travel short distances. Radio breakdowns were a consistent problem during the programme and the need for a qualified radio technician to visit radio installations regularly to service and repair equipment is stressed. Unfortunately, this means that villages that are inaccessible by conventional transportation are the least likely to establish radio communication. (RMB)

2475 Macdonald, G. *Training and utilization of auxiliary personnel.* In Seventh International Congress on Tropical Medicine and Malaria, London, London School of Tropical Medicine, n.d., 133-134. Engl.

Seventh International Congress on Tropical Medicine and Malaria, London, England.

The four types of medical personnel providing services in WHO's African region are the scientifically trained graduate, the multipurpose practitioner of curative and preventive medicine, the auxiliary who works under supervision, and the single-purpose ancillary trained to work independently in a specific field. Training programmes for these workers are too few to provide sufficient graduates to service the area effectively and in future emphasis must be placed on decentralized training for practitioners and lower-level auxiliaries. At present, the practitioner's training consists of 4 years of study and 1 year of compulsory supervised service. The first 2 years concentrate on biology, anatomy, and physiology and the next 20 months on clinical practice. A 2-year course in medical and maternity aid is offered to auxiliary workers. (ES)

2476 Mount Carmel International Training Centre for Community Services, Haifa. Lesotho, Ministry of the Interior. *Course on rural community development: fieldwork in Lesotho.* Haifa, Israel, Mount Carmel International Training Centre for Community Services, Jun 1976. 29p. Engl.

See also entries 2365 and 2434.

In July 1976, participants in a rural community development course sponsored by the Mount Carmel International Training Centre, Israel, undertook field work in Lesotho. They carried out a survey on a sample population of the village of Mafefooane, interviewed villagers, tabulated the data, and analyzed their findings. They found that health in the village was satisfactory but noted that sanitation was lacking and that the health clinic needed improvement. They recommended

that community education be developed, that a nutritionist teach child care to the villagers, and that a community centre be established. Their experiences during the field work proved valuable as preparation for their later community development work. Questionnaire samples are included as well as numerous tables on family composition, agricultural produce, occupation and education, and schooling. The report was written by the participants several of whom were from Lesotho. (EE)

2477 **Najarzadeh, E.** Pahlavi University, Shiraz, Iran. *Kavar village health worker training project: structure, function and progress.* Shiraz, Iran, Pahlavi University, Sep 1974. 71p. Engl.
See also entry 2479.

A pilot study conducted in Iran aimed to determine the feasibility of utilizing barely literate villagers to provide primary health care. The project comprised 6 months preparation during which students were selected, coursework devised, etc.; 6 months training; and 2 years field-work during which the village health workers (VHWs) were deployed and followed up. This detailed account of the project describes the criteria for student selection; the training method and textbook; the behavioural objectives of the course; the responsibilities of the village health worker; the VHW's salary and benefits; the VHW's introduction to the village leader, village council chiefs, and other prominent villagers; the VHW's work schedule; drugs and facilities required by the VHW; and the programme for supervision. Further details concerning student characteristics, performance, evaluation forms, etc., are appended. (HC)

2478 **Nigeria, Ministry of Health.** *Approved syllabus for the training of rural health assistants, 1972.* Calabar, Nigeria, Ministry of Health, Institute of Public Health, 1972. 7p. Engl.
Unpublished document.

The 2-year rural health assistant course offered by the Institute of Public Health, Nigeria, begins in April each year. The coursework of the first 6 months, which follows a daily schedule of 2 hours of lectures, 2 hours of revision, and 2 hours of demonstrations, is composed of study in anatomy, physiology, nutrition, and hygiene. For the next 4 months, the students received training in history-taking, patient examination, diagnosis, etc., to prepare them for clinical work in a health facility near their homes. The final stage in their coursework is a daily routine of 3 hours clinical practice/observation in a rural dispensary, health office, general hospital, infectious disease hospital, community nurses training centre, school, etc.; 2 hours of theory; and 1 hour of laboratory work. Topics treated include immunity, natural and acquired; pharmacology; methods of drug administration; vector-borne, infectious, and parasitic diseases; diseases of the eye, ear, and skin; respiratory, digestive, urinary, nervous, and reproductive system disorders; nutritional deficiencies; first aid and minor surgery; elements of nursing; and environmental sanitation. A more detailed breakdown of these subjects is given in the attached syllabus. (HC)

2479 **Pahlavi University, Shiraz, Iran.** *Kavar village health worker project.* Shiraz, Iran, Pahlavi University, Department of Community Medicine, School of Medicine, 1975. 125p. Engl.

This report describes the Pahlavi University (Iran) training project for auxiliary health workers from 1972-1975. The project was divided into three phases: 6 months of preparation – outlining objectives, surveying local villages, and selecting personnel and trainees; 6 months of training literate villagers in primary and preventive care; and 2 years of field work, during which trainees began working as village health workers (VHWs). In part I of the report these phases are examined in detail and future plans are discussed. Part II presents the design of a three-step, comprehensive evaluation system for the project. Methods of data collection and analysis are outlined. The first step of this evaluation indicates that VHWs are highly productive and well accepted in the villages they serve; the effects of VHWs upon utilization of physician-run health corps stations are also studied in this section of the evaluation. The second and third steps will measure the impact of VHWs on mortality, birthrates, and family size, and the knowledge, attitudes, and practices of villagers concerning nutrition, hygiene, home sanitation, and family planning. Implications for the deployment and training of village health workers, the organization of their activities in the field, and their potential interaction with the health corps are discussed. Statistical data are included. (RMB)

2480 **Pan American Health Organization, Washington, D.C.** *Adiestramiento de personal auxiliar en salud publica. (Training of auxiliary personnel in public health).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 61(11), Nov 1966, 363-385. Span.

Guidelines for the training and deployment of Latin American public health auxiliaries were formulated by a PAHO study group in 1966. They called for health decision-makers to create auxiliary programmes and to establish a permanent infrastructure for training, supervision, and referral. They also urged special training for supervisory and teaching professionals, in-service practice and field work, development of teaching manuals, and careful selection of indigenous students. Finally, they charged national ministries of health with responsibility for all matters relating to the planning and training of auxiliary personnel. (HC)

2481 **Papua New Guinea, Department of Public Health.** *Selection, training and utilisation of aid post orderlies.* Papua New Guinea, Department of Public Health, 1972. 68p. Engl.

This compilation of papers dealing with the deployment of aid post orderlies (APOs) (basic health workers) in Papua New Guinea covers village health services (a job description of APOs); current statistics; the interrelationships between government, church, and council

aid posts; conditions of service and career prospects for APOs; personal and professional problems facing the APO today; APO selection; APO training at Mount Ambra Training Centre; in-service education for APOs; the future of the aid post system; a possible alternative pattern of village health care; and the syllabus for APOs. (HC)

2482 **Papua New Guinea, Department of Public Health.** ***Syllabus for health extension officers: proposed changes in course for H.E.O.*** **Port Moresby, Department of Public Health, n.d. 100p.** Engl.

Unpublished document.

The content, teaching methods, timetable, and aims of the 3-year course for health extension officers in Papua New Guinea are delineated. Subjects include: human ecology and disease; human biology (anatomy and physiology); first aid; human behaviour (the meaning and methods of sociology, anthropology, and social psychology); mathematics and statistics; nutrition; environmental sanitation (including field-work); disease control; microbiology, parasitology, and entomology; human reproduction and family planning; child health; pharmacology; ward procedures and dressing techniques (general nursing); health education; clinical duties in medicine, surgery, obstetrics, history taking and physical examination, etc.; health centre administration; public health administration; and community practice. Graduates of the course are expected to administer and operate a health centre serving up to 40 000 people. (HC)

2483 **Peru, Ministerio de Salud.** *Informe final del seminario sobre adiestramiento de auxiliares sanitarios. (Final report on the health auxiliaries training seminar).* Lima, Ministerio de Salud, 1974. 12p. Span.

Health Auxiliaries Training Seminar, Lima, Peru, 15-18 Apr 1974.

In an effort to staff minimal health care services for 3 million rural inhabitants who are without access to medical aid, the Peruvian government organized a seminar in 1974 to set up guidelines for the formulation of a national plan for training auxiliary health workers. The activities of an auxiliary health worker were defined as first aid, health education, immunization, environmental sanitation, disease control, maternal child health, nutrition, collection of vital statistics, distribution of basic medicines, maintenance of medical records, and administration of a health post serving 2 000-3 000 people. The career levels and qualifications of auxiliary health workers were also discussed. It was decided that a school of public health should establish a 6-12 month course for 20-30 students, to begin in 1975, and the course content, financing, and expenses were considered. The report concludes with a list of recommendations about updating and expanding the course once it has been established. (RMB)

2484 **Raza, S.H.** *Problems of health in rural areas.* Hamdard (Karachi), 14(3-4), Jul-Sep 1971, 46-48. Engl.

For complete proceedings see entry 2394.

The author criticizes the government of Pakistan for not sufficiently supporting the three indigenous systems of medicine, which, he says, are providing most of the health care in rural areas. He notes that indigenous practitioners such as homeopathic doctors, *veds*, and *hakims* are willing to practice in rural areas, but they need to receive training. The author adds that, unless the government provides finances to upgrade training, the traditional doctors are likely to provide poor care. He recommends that the valuable contribution of traditional medicine be recognized and given much needed financial and political support. (AC)

2485 **Ronaghy, H.A., Solter, S.** *Is the Chinese "barefoot doctor" exportable to rural Iran?* Lancet (London), 1(7870), 29 Jun 1974, 1331-1333. Engl. 8 refs.

An attempt to establish a cadre of auxiliary health workers in Iran based on the model of the Chinese barefoot doctor met with obstacles of a cultural and political nature. The attempt took the form of a pilot project to recruit and train village health workers (VHWs) and middle-level health workers (MLHWs) from 40 villages in the area surrounding the Health Corps station at Kavar. Difficulties began when village leaders, asked to recommend literate individuals for the position of VHW, picked close relatives and friends. The intense individualism of Iranian village leaders renders collective decision-making or consensus almost impossible. In addition, recruitment of women for maternal and child health work was thwarted by husbands or male relatives who would not allow them to leave the village for training; the Iranian educational system, which emphasizes memorization, made the "integration of theory and practice" a difficult concept to apply; and curative medicine and its trappings immediately seized the imagination of the students, while preventive medicine elicited little interest. Moreover, upon the VHWs' return to their villages, their practices were immediately declared suspect by members of rival factions and occasioned much dissension. (HC)

2486 **Smith, R.A.** *Medex.* Lancet (London), 2(7820), 14 Jul 1973, 85-87. Engl. 13 refs.

The medex programme (USA), which trains auxiliary health workers to deliver primary care in remote areas, has six basic elements that make it flexible enough to be adapted to the local needs and resources of any nation in the world: (1) a collaborative model of the programme is established by all groups who have a vested interest in the health field under the auspices of a respected medical school or teaching hospital that can ensure quality training, programme stability, certification of professional competence, and public credibility and acceptance; (2) both the community and other health professionals receive orientation so that they accept the medex and, if possible, his legal status is defined; (3) physicians are involved in all stages of the

programme so that through their participation they may appreciate the personal benefits to be gained from the assistance of auxiliary personnel; (4) training emphasizes the ability to perform specified tasks rather than the accumulation of degrees, because this method saves time, money, and unnecessary retraining of students who already have a background in the health field; (5) physicians who are involved in the programme provide a built-in deployment system for medex graduates; and (6) continuing professional development is provided for and is based on the expressed needs of health professionals, the community, and medex personnel. Thus far, existing medex programmes have increased physician efficiency by 75-125% and successfully handled 80% or more of the problems in supervised outpatient clinics. These figures and the adaptability of the programme to multiple socioeconomic, cultural, and geographical settings indicate that the medex programme is one of the most encouraging developments in health manpower in recent decades. (RMB)

2487 **van de Kous, W.** Malawi, Ministry of Health. *Second medical assistant training school in Malawi.* MOYO (Blantyre), 7(3), Jul 1975, 6-7. Engl.

In 1974, Malawi's second training school for medical assistants was founded at Mlambe Hospital, Lunzu; its initial enrollment was 12 students. The 3-year programme offered theoretical lectures, clinical hospital experience, excursions to industrial and environmental facilities to study sanitation and public health practices, and a tour of duty with a mobile health unit. Graduates of the course are qualified to direct rural clinics and health centres. (RMB)

2488 **van Etten, G.M., Raikes, A.M.** *Training for rural health in Tanzania.* Social Science and Medicine (Oxford), 9, Feb 1975, 89-92. Engl. 11 refs. Fourth International Conference on Social Science and Medicine, Elsinore, Denmark, 12-16 Aug 1974.

Tanzanian medical auxiliaries share the Western view that health services and personnel form a hierarchy in which both auxiliaries and medical services receive low status. In addition, even when the auxiliaries come from villages and rural areas, they tend to regard the rural population as ignorant, tradition-bound, and inferior to urban inhabitants. The resulting lack of communication between health workers and rural patients has led to poor community participation in health services and education and has reinforced the negative image of rural populations. Recently, efforts have been made to reorient auxiliaries and their training has begun to stress public health and political education. These changes aim to prepare students for practice in rural areas and to make them aware of national rural development policies. The authors suggest that additional medical and nonmedical (i.e., child care) auxiliaries be selected and trained in their own villages and that both professionals and nonprofessionals be trained to function as a health team. (RMB)

2489 **Wang, Y-L.** *Training of the barefoot doctor in the People's Republic of China: from prevention to curative service.* International Journal of Health Services (Westport, Conn.), 5(3), 1975, 475-488. Engl.

During a visit to six different localities in the People's Republic of China, the author interviewed 36 barefoot doctors and noted three distinct patterns in their training, role, and functions representing different stages in a progression from preventive to curative care. At the July One Commune, which exemplified the first pattern or stage, she found that barefoot doctors received minimal training and performed duties limited to immunization, health education, family planning, and the treatment of common illnesses, whereas at the Four Season Green Commune – the second pattern – they staffed the hospital and provided all the services. Of necessity, they had undertaken more (in-service) training and spent less time in the fields than had their July One counterparts, but they had not had as much training as those at the August One Commune, which was representative of the third pattern. In this commune, as health station staff, barefoot doctors provided preventive services and offered a broad range of treatment including surgery, internal medicine, dermatology, first aid, and emergency care. These three patterns illustrate the close link between community needs and barefoot doctor training and role; they also suggest a trend whereby, as living standards and expectations rise, barefoot doctors will be trained for duties associated with chronic and degenerative conditions. (AC)

2490 **Wen, C.** *Barefoot doctors in China.* Lancet (London), 1(7864), 18 May 1974, 976-978. Engl.

The training of barefoot doctors in China began in 1965 when an urban mobile medical team trained a group of peasants from a commune on the outskirts of Shanghai to provide their comrades with basic health services. Today, barefoot doctors, numbering over a million, form the backbone of rural medical services. Their initial training period of 3-6 months is provided by commune or county hospitals, locally by mobile service teams, or by temporary medical schools; additional training is given each year. In general, initial training includes treatment of common diseases; the rudiments of acupuncture; the medical indications for some common Western medicines; the use, preparation, and cultivation of local medicinal drugs; routine skills such as injection, surgical dressing, and first aid; and (for women barefoot doctors only) midwifery, maternal and child care, and family planning. Additional learning takes place when practicing barefoot doctors ask questions arising from their work. Sometimes contributions to medical science are made in their practices. For example, one barefoot doctor discovered a new treatment for boils. The teaching methods used to train barefoot doctors in the Wangshan People's Commune, Lochang County, Kwangtung Province, are reviewed in some detail. (HC)

2491 **WHO, Geneva.** *Education and treatment in human sexuality: the training of health professionals. Report of a WHO meeting.* Geneva, WHO Technical Report Series No.572, 1975. 33p. Engl.

Also published in French, Russian, and Spanish.

Human sexuality, according to a 1974 World Health Organization expert committee, substantially influences the health of peoples of all nations but has been virtually ignored by most health programmes. Participants, armed with background papers that ranged from behavioural sex therapy to information sources, defined sexual health as the integration of the somatic, emotional, intellectual, and social aspects of sexual being, in ways that are positively enriching and that enhance personality, communication, and love. Basic services to ensure sexual health are the provision of information about biological and psychological aspects of sexual development, human reproduction, the variety of sexual behaviour, sexual dysfunction, and disease; education toward positive attitudes toward sexuality; and resources to deal with complex sexual problems. Educational programmes to prepare health personnel to provide these services should aim to promote appropriate attitudes, impart suitable knowledge, and develop the art of communication and good listening. Priority students are social workers, teachers, marriage counselors, medical students, and physicians. Curriculum should at least include an introduction to basic concepts and the sexological aspects of every health discipline. (AC)

2492 **WHO, Geneva.** *Training and utilization of feldshers in the USSR.* Geneva, WHO Public Health Papers No.56, 1974. 52p. Engl.

Also published in French.

In the USSR, middle-level health workers, feldshers, have been providing primary health care since the 17th century and at present their training and utilization are firmly rooted in the Soviet education and health system. Their numbers are regulated through school admission standards that are calculated mathematically. Training is open to anyone under 30 who has completed 8 years of general schooling and it comprises 2 1/2 or 3 1/2 years of general studies, general medical studies, and clinical studies. About half the course time is devoted to practice and the final 10 weeks takes place within a health care facility – hospital, feldsher post, maternity home, etc. Postgraduate training is available in general medicine or a specialty and aims to prepare feldshers for duties in isolated posts, on board ships, in emergency medical units, and in child health clinics. Duties undertaken by feldshers vary widely with their place of employment. For instance, a feldsher employed by an industrial health service arranges follow-up surveillance for chronically ill patients, organizes periodic medical examinations for healthy workers, implements disease control measures, proposes modifications in working conditions to promote health, etc., whereas a feldsher in an epidemiological centre investigates and analyzes health statistics, performs laboratory tests, and provides hygiene instruction to patients. A curriculum for general feldsher training and one for feldsher sanitarian training are appended. (AC)

2493 **WHO, Geneva. Pitcairn, D.M. Flahault, D., ed(s).** *Medical assistant: an intermediate level of health care personnel.* Geneva, WHO Public Health Papers No.60, 1974. 171p. Engl.

International Conference on the Medical Assistant, Bethesda, Md., 5-7 Jun 1973.

Also published in French and Spanish.

In June 1973, educators and health policymakers from more than 20 countries met to discuss middle-level health care personnel. They examined training programmes, accreditation, legislation, and professional attitudes. The director-general elect of WHO, Halfdan Mahler, opened the sessions and stressed the importance of breaking down vested interests that prevent effective employment of middle-level health workers. He also commented that a moderately intelligent person could learn in a very short time most of the effective procedures within the different medical specialties. Other papers and discussions were based on assumptions that middle-level health workers had completed 8-9 years general education and 2-3 years technical training. The entire conference report is set forth and a list of participants is annexed. (AC)

2494 **Woman and Child Health Care Station of Jutung County, Kiangsu, China PR.** *Barefoot doctors active in rural child health care.* Chinese Medical Journal (Peking), 1(2), Mar 1975, 95-98. Engl.

Fourteenth International Congress of Pediatrics, Buenos Aires, Argentina, 3-9 Oct 1974.

Since 1966, barefoot doctors have become important members of the health team serving Jutung County, Kiangsu Province (People's Republic of China); they have increased immunization rates among the population to 97.7% for smallpox, 91.4% for poliomyelitis, and 88.8% for DPT. They have also contributed to lowering mortality for infants and newborns. These successes are proof of the barefoot doctors' efforts in child care. In 1973 alone, they examined and treated more than three-fourths of all preschool children in the county, instructed kindergarten and nursery workers in establishing health regulations, and assisted in teaching hygienic habits to children in day care centres. (AC)

2495 **Wren, G.R.** *Educating hospital administrators for Saudi Arabia.* Hospital and Health Services Administration (Chicago, Ill.), Summer 1976, 71-76. Engl.

In 1972, the government of Saudi Arabia moved to relieve physicians of administrative duties within hospitals and replace them with trained administrators. It used a two-pronged training strategy. Thirteen students entered master's degree courses at the American University in Beirut and another 25 undertook 21 months training at Georgia State University in a curriculum tailored especially for their needs. By 1976, 25 more students were enrolled at GSU and 30 graduates

were ready for employment by the Ministry of Health. At present, several of the graduates have been appointed directors of hospitals, but their acceptability has not yet been evaluated. (AC)

2496 **Yates, A.S.** *Venezuelan Medicina Simplificada program.* Public Health Reports (Rockville, MD.), 90(3), May-Jun 1975, 247-253. Engl. 22 refs.

In Medicina Simplificada, a Venezuelan programme, auxiliary health workers deliver basic curative, preventive, and educational health services in rural areas. These auxiliaries are permanent community residents between 18 and 40 years old with primary school education and leadership ability. They undergo 4 months training in the district health centre, which has a rural atmosphere but carries a sufficient caseload for instructional purposes. Training is practical, emphasizing the acquisition of specialized skills in public health, administration, and epidemiology; nursing, maternal and child health; care of prevalent acute and chronic diseases; first aid; environmental sanitation; and health education. Upon graduation, the auxiliaries return to their communities to staff rural dispensaries, devoting half their time to preventive medicine. To date, auxiliaries have demonstrated that they can work productively with a minimum of supervision and have improved the quality and availability of health care in the rural zones. (HC)

2497 **Ziai, M., Dehghan, R., Mostafavi, F., Barakat, R., Sadre, M., Fendall, R., Gharib, N., Stang, J.C.** *Curriculum for the new College of Health Sciences: a departure from the traditional medical education.* Pahlavi Medical Journal (Shiraz, Iran), 7(4), 1976, 529-539. Engl.

Iran's College of Health Sciences, which aims eventually to provide training for all members of the health team, has initiated a course for primary health workers (*behdars*). The course is based on principles of teamwork and comprehensive care. It comprises a total of 33 months that have been divided into four blocks of study. The first two blocks, which are undertaken at the college, are devoted primarily to classroom study in the basic sciences, English, history-taking, and physical examination. The last two, which constitute an internship, are undertaken at small community hospitals, clinics, rural dispensaries, and the college. Although the course devotes much time to academic subjects, the material has been chosen for its direct relationship to *behdar* duties and problem-solving. Graduates of the course enter rural practice, theoretically under the supervision of a physician. After 2 years, they may apply for admission into a medical degree course. Their acceptance will be based on achievement during *behdar* training, knowledge of English, performance on competitive examinations, and evaluation of their rural practice. (AC)

IV.2 Primary Nursing Care

IV.2.1 Professional

See also: 2104, 2127, 2128, 2129, 2131, 2137, 2174, 2255, 2334, 2363, 2428, 2433, 2437, 2442, 2524, 2532, 2533, 2577, 2580,2590, 2593, 2609, 2622, 2651

2498 **Bergman, R.** *Nursing manpower: issues and trends.* Journal of Nursing Administration (Wakefield, Md.), 5(5), 1975, 21-25. Engl.

The author discusses the reasons for the present international shortage of nurses, attributing it to poor utilization of available personnel, poor career advancement, low salaries, inappropriate training, etc., and presents two models of nurse manpower studies – one local and one national. The primary objectives of these models are to provide a basis for the training and deployment of nursing personnel in accordance with health needs and resources and to identify methods of improving the utilization of existing personnel. Nine steps are proposed for a predictive study of nursing manpower: analysis of the demography and health needs of the population, analysis of health services and their utilization, analysis of available and potential nursing manpower and its utilization, study of resources (schools) for preparing nursing personnel, projection of the future needs of the population, projection of the manpower required to meet these needs, projection of the future supply of nursing personnel, detection of any imbalances between the expected need and supply, and formation of alternatives and recommendations to prevent or correct such imbalances. The author feels that, to be most effective, national planning for nursing manpower should be incorporated into national health planning that is in turn related to national economic and development planning. (EE)

2499 **Biddulph, J.** *Role and training of hospital paediatric nurses in Papua New Guinea.* Australian Paediatric Journal (Melbourne), 1, 1975, 20-25. Engl.

A 12-month postgraduate pediatric nursing course established in 1971 at the Port Moresby General Hospital (Papua New Guinea) produces 10 nurses per year to staff pediatric wards in district and regional hospitals. The students spend 1 day per week in class and the rest of the time they practice in an acute pediatric ward, a diarrhea ward, a special care nursery, a pediatric outpatient department, a nutrition rehabilitation unit, and a maternal child health clinic. Their training prepares them to diagnose problems of more than 90% of pediatric outpatients and to initiate treatment in 95% of recognizable illnesses; it emphasizes treatment of lower respiratory tract infection, diarrhea, malaria, and meningitis, which account for 45% of pediatric hospital admissions and 55% of pediatric hospital deaths. Because these diseases progress so rapidly in children, nurses are encouraged to diagnose and treat suspected cases on their own initiative, especially if a doctor is not available. (RMB)

2500 **Biddulph, M.** Papuan Medical College. Port Moresby. *"B" nursing syllabus.* Port Moresby. Papuan Medical College. School of Nursing. Feb 1969. 153p. Engl.

See also entries 2270. 2508. 2519. 2589. 2596. and 2618.

The syllabus for advanced nursing in Papua New Guinea details student selection, curriculum, course duration. faculty. and student evaluation. The course. which lasts 4 years. comprises 56 weeks classroom study and 107 weeks clinical practice. Coursework includes basic sciences (anatomy and physiology. chemistry and physics. human biology. etc.). clinical sciences (child health. drugs and their administration. first aid. etc.). and preventive and social sciences (environmental health. nutrition. sociology. etc.). Much of the classroom study is integrated with personnel in other disciplines. Minimum entrance requirements are the satisfactory completion of both form III and the public service evaluation test. At the end of training. students must pass the examinations set by the General Nursing Council. Examples of forms used for field trips. student evaluations. and course organization are appended along with a bibliography of audiovisual and other teaching aids. (AC)

2501 **Cheng, M.E.** *Role of nursing.* In Quinn. J.R.. ed.. China Medicine As We Saw It. Washington. D.C.. U.S. Government Printing Office. DHEW Publication No.(NIH) 75-684. 1974. 163-179. Engl.

See also entries 2154. 2193. 2260. and 2435.

The role of nurses in the People's Republic of China. as seen by a visitor from the West. is primarily in the field of maternal child health. although it includes nursing care for hospital patients who are not ambulatory. The main duties are to visit homes. examine newborns. promote immunization and sanitation programmes. and encourage mass action for health. Nurses also maintain medical records and supervise barefoot doctors or their equivalent in the factories. They enjoy a status similar to doctors and may retire at 55 at no less than 60% of their salary. which is prorated to the cost of living. Nurse training. which is open to those with 6 years primary education and 3 years middle school. comprises 2 years of work in the classroom. hospital. and countryside and 1 year of closely supervised practice. (AC)

2502 **Edwards, P.J.** *Teaching specialist English (with special reference to English for nurses and midwives in Nigeria).* English Language Teaching Journal (Oxford). 28(3). Apr 1974. 247-252. Engl.

Language training for health sciences students who are being taught in a language other than their mother tongue should stress essential language skills and basic vocabulary that will be used by specialist tutors. Training must provide students with both an understanding of medical terminology and also an ability to recognize it accurately in speech. such as verbal or telephoned instructions. It should also foster selective abilities needed for note-taking. summarizing. and distinguishing important from irrelevant data in case histories. etc. These skills can be taught by carefully graded assignments devised from materials the students encounter in day-to-day lectures and clinical course requirements. (AB)

2503 **Khoury, J.F.** *Nursing in Kuwait.* International Nurses Review (Geneva). 20(1). Jan-Feb 1973. 12-21. Engl. 15 refs.

Kuwait's system of free health services suffers from both a shortage of nurses and a misuse of nurses' talents. The three courses of nursing – the 3-year diploma course. 1-year nurse-midwife programme. and 2-year nursing assistant programme – rely on foreign staff and train many foreign students with varying degrees of education and different languages. Consequently. communication is difficult and close supervision is necessary. New standardized educational and language requirements for each training course have been introduced. efforts are under way to attract more Kuwait girls to upgrade the profession's status. and a special 12-month programme in administration and management now offers them career opportunities as head nurses. The nursing services are in a process of reorganization intended to place an increased emphasis on patient care. With the help of WHO experts. researchers have analyzed the educational and professional limitations of existing staff and created new procedure and policy manuals to improve patient care and to utilize staff potential more effectively. Tables and graphs portray the structure and growth of the educational. health. and nursing services. (ES)

2504 **Kromberg, M., Mashalaba, N.N.** ***Formation des monitrices en mieux-etre familial au Botswana. (Training of family health promoters in Botswana).*** Assignment Children (Geneva). 33. Jan-Mar 1976. 100-108. Fren.

For the past 4 years. the government of Botswana has been training family health promoters to work in rural villages. Students comprise women with 7 years primary education. a working knowledge of the English language. suitable character and maturity. and the endorsement of their local village. They attend the rural training centre in Denman for 11 weeks and study health promotion and preventive medicine. teaching methods. family planning. first aid. structure of health and social services. record-keeping. and the recognition and treatment of a number of specific conditions. Their course is composed of 6 weeks theory. 3 weeks practice in a dispensary. and 2 weeks revision and evaluation. After completing the course. the promoters enter practice. guided by weekly visits from a nurse or nurses' aide. Thus far. practicing promoters have provided valuable liaison between health services and villagers and have been accepted as essential members of the health team. They are currently being trained at the rate of 60 per year. (HC)

2505 **Maglacas, A.M., Hammad, A.E., Djojoingto, W.** WHO. Geneva. *Nursing education: the changing pattern in Indonesia.* WHO Chronicle (Geneva). 30(11). Nov 1976. 461-463. Engl.
Also published in French, Russian, and Spanish.

To eliminate some of its 48 overlapping categories of health workers, the Indonesian Ministry of Health integrated its health care delivery and manpower training policies with national economic and social development policies. This led to a massive reorientation of nursing and midwifery education toward community aspects of medicine, task-related training, and elimination of domestic and routine procedures. New teaching approaches were tested, such as the one used at the WHO-sponsored Cilandak training school that first offered students field experience in four rural communities and then fashioned course content to fit the field experience. The most significant change was the creation of the primary health nurse or *perawat kesahatan* (PK), a community nurse trained especially for work in isolated villages. This worker, along with the university-educated nurse, forms the backbone of the reorganized system. The PK has 9 years of general education and 3 of nursing training; as soon as she has accumulated 2 years experience, she becomes eligible for specialty training. In 1975, 10 PK schools were established and 50 more are projected for 1977 – the eventual goal, 10 PK per 4 000 population. (RMB)

2506 **Niger, Ministere de la Sante Publique et des Affaires Sociales.** *Programme en trois ans d'etudes: formation d'infirmiers(e) polyvalents(e). (Training for multipurpose nurses: a 3-year programme).* Niamey. Ministere de la Sante Publique et des Affaires Sociales, n.d. 26p. Fren.
Unpublished document.

A 3-year nursing course in Niger has been designed to prepare the nurse to practice in a hospital, rural health centre, or mobile health team acting independently or under supervision. The course content is flexible, being strictly determined by current needs in these fields but, in general, aims to impart knowledge of the health infrastructure in Niger; health priorities; the role of each member of the health team; disease prevention and health promotion; health education at family, community, and professional levels; nursing skills; the administration of treatment with or without supervision; health centre administration; the training and supervision of lower-level workers; and cooperation with local authorities and other agencies in the attainment of public health aims. Twenty-seven percent of the course content is academic (French, mathematics, psychology, etc.), 35.5% is professional (nursing skills, pathology, etc.), and 37.5% is supervised practice in the hospital, health centre, or mobile service. A detailed breakdown of the curriculum, indicating the number of hours devoted to each subject, is given. (HC)

2507 **Nigeria. Ministry of Health.** *Syllabus for community nurses basic course and schedule of training.* Calabar, Nigeria. Ministry of Health, Institute of Public Health, n.d. 1v.(various pagings). Engl.
Unpublished document.

The basic course for community nurses, offered by the Institute of Public Health, Calabar, Nigeria, gives the student opportunities to develop skills in providing community health education, organizing and managing infant welfare and antenatal clinics, home visiting, conducting deliveries, caring for the sick in rural health centres, and supplementing the work of other health workers in giving emergency care. The course comprises 6 months of theoretical work in the classroom complemented by visits once a week to an appropriate institution, such as a psychiatric clinic, remand home, juvenile court, nutrition unit, rural community development centre, quarantine home, orphanage, old people's home, refuse disposal, water works, Ministry of Agriculture, market, medical field unit, health education unit, or veterinary establishment; and 5 months of clinical training in urban and rural maternal and child health facilities. A more detailed breakdown of the subjects covered and the activities included in the course is attached. (HC)

2508 **Nursing Council for Papua New Guinea. Port Moresby.** *Syllabus: registered nurse.* **Port Moresby, Nursing Council for Papua New Guinea,** n.d. 61p. Engl.
Unpublished document: see also entries 2270, 2500, 2519, 2589, 2596, and 2618.

Registered nurse training in Papua New Guinea is open to persons 16 and over who have completed form III. It comprises 1 783 hours of classroom instruction and 95 weeks practice in medical, psychiatric, and surgical wards in hospital, maternal child health and nutrition clinics, outpatient departments, and the operating theatre. Criteria for institutions that undertake training of registered nurses are set forth and a breakdown of subjects and timetable is provided. (AC)

2509 **O'Donnell, M.** *Who knows best what patients need?* World Medicine (London). 8(13). 21 Mar 1973. 55-65. Engl.

An experimental programme in Indonesia trains nurse-tutors to listen to the people and encourage self-help – an approach especially suited to the country's strong tradition of community decision-making and self-reliance. Donning national dress rather than white coats, the nurse-tutors first spend their days becoming acquainted with inhabitants of a village. Then they begin to urge villagers to help themselves and to contribute money, labour, and materials toward meeting felt needs. The nurse-tutors serve as neighbours with special knowledge, seeking expertise outside the village when necessary and liaising between villagers and Ministry of Health personnel, who are sponsoring the programme. The Ministry's plan is that the first nurse-tutors will teach others and thus build up by arithmetic progression a health system rooted in the community. If the plan succeeds, other countries may learn from the example. (AB)

2510 **Samuel, B.I.** *Our position in the health team.* Nursing Journal of India (New Delhi), 67(12), Dec 1976, 205. Engl.

Nursing and medicine, each with its unique services and knowledge base, are interdependent professions with a shared goal – total patient care – but they do not have equal status. The medical profession has long regarded nursing personnel as supportive labour and nurses have not united to gain professional recognition or to confront such attitudes. Nevertheless, nurses are the major productive energy in the health field and constitute a powerful force for bringing about needed change. They must, according to the author, apply themselves collectively, constructively, and cooperatively to the task of gaining recognition as appropriate participants in policymaking. (HC)

2511 **Shachor, S.** Kupat Holim, Tel Aviv. *Contribution of social work in the development of comprehensive family health care.* Family Physician (Tel Aviv), 4(8), 1974, 174-181. Engl.

International Workshop on Family Medicine, Herzliya, Israel, 20-29 Sep 1972.

For complete proceedings see entry 2433.

In 1968, the Department of Family Medicine at Tel Aviv University initiated a programme to expand the services of four different clinics in Tel Aviv so that they could provide family health care including social work. Graduate social workers with 3-7 years experience were attached to the clinic and were directed by the university's chief social worker. The main functions of the social workers were to diagnose and assess psychosocial problems, to liaise between patients and community resources, and to oversee therapy of selected patients. The various cultural backgrounds of the patients necessitated different approaches for the social workers, particularly in mental health counseling, and these are detailed. Over the years, the programme has shown that social work has an important contribution to make by helping patients and families with their various problems, by enhancing health teamwork, and by creating a more humane climate in the delivery of health care through social planning and policymaking. The population, community, practice organization, and staff background of each of the clinics is given, as well as two tables showing the range of comprehensive care and a breakdown of the social workers' activities in these clinics. (EE)

2512 **WHO, Geneva.** *Community health nursing.* Geneva, WHO Technical Report Series No.558, 1974. 28p. Engl.

Also published in French, Russian, and Spanish.

The focus of this report by a WHO expert committee is the training and role of community health nurses. According to the committee, the community health role depends on the ability of nursing personnel to alter the medical and nursing value system, the disease emphasis, the rigidity in health services planning, the isolation of health from other sectors, and the low status of providers of primary nursing care. It also depends on their success in motivating community participation, designing new models of nursing education, and dismantling barriers to effective team communication and operation. Nursing personnel must be willing to shift education and service from institution-centred to people-oriented values and to view life dynamically, recognizing illness and hospital care as mere episodes in life. The community health nurse is a generalist whose activities include participating in the examination of individual, family, and community health; identifying health problems; implementing solutions; and evaluating care. Duties also are to teach and encourage other health workers, to communicate with and motivate population groups, and to interrelate community nursing with other systems, at times leading the health team and at other times sharing the leadership role with persons who are more versed with particular health problems. (AC)

2513 **Yodfat, Y.** Kupat Holim, Tel Aviv. *Avodat tzevet berfuat hamishpacha. (Teamwork in family medicine).* Family Physician (Tel Aviv), 1(1), 1970, 51-54. Hebrew.

Teamwork by the family doctor and the family nurse was introduced as a work system in the Kupat Holim (sick fund) clinics of the semi-rural area of Beit Shemesh, Israel, in 1967. This system imposes many new and even unfamiliar tasks on the nurse. Her main duties now include screening patients, treating them for minor illnesses, writing prescriptions, measuring blood pressure, and providing medicosocial services, in addition to the customary tasks of giving injections, applying dressings, and taking blood specimens for laboratory tests. This system has succeeded in reducing both the number of patients seen by the doctor and the waiting time of the patients. It has resulted in increased satisfaction for the patients and the medical team and has improved the quality of medical care. It is anticipated that the success of this system and its future development will have favourable implications for the health of the inhabitants of the town. (Modified author abstract.)

IV.2.2 Nonprofessional

See also: 2104, 2125, 2127, 2128, 2129, 2151, 2255, 2330, 2383, 2398, 2462, 2498, 2502, 2505, 2589, 2596, 2598, 2600, 2612,2618, 2622, 2628, 2629, 2640, 2650, 2668, 2779

2514 **Chickadonz, G., Evans, L., Hirschhorn, N.** *Insights gained from teaching and working with Apache nursing assistants.* Health Services Reports (Rockville, Md.), 88(8), Oct 1973, 703-708. Engl. 20 refs.

During a 3-month hospital-based project at the Fort Apache Indian Reservation (Arizona. USA). 12 Apache women assisted 14 health professionals in investigating the causes of diarrhea in Apache children and in testing a simplified method of treatment. The women were given an intensive 1-week training course. which was followed by on-the-job training and continued classroom instruction. They learned how to care for children with diarrhea. how to collect data and specimens. and how to estimate fluid requirements and initiate rehydration. Nine women worked on the project to its conclusion. The authors describe the cultural barriers that were encountered and overcome during the project and suggest that the existing health care system accentuated cultural differences. They feel that Indians must become increasingly responsible for the design of their own health care system and. thus. must be offered roles in health care at all levels. (HC)

2515 Ethiopia, Ministry of Public Health. *Elementary dresser curriculum.* Addis Ababa. Ministry of Public Health. May 1969. 6p. Engl.
Unpublished document: see also entries 2461. 2462. 2516. 2598. 2599. and 2600.

In Ethiopia. the elementary dresser is an auxiliary employed in a hospital. health centre. or health station under the supervision of a physician. health officer. professional nurse. or advanced dresser. His duties include: performing routine services in the care of patients: providing a suitable environment for the patient: administering first aid: applying dressings. binders. ointments. etc.: assisting in applying casts and braces: moving patients: sterilizing instruments. etc. His 1-year training comprises basic courses in hospital and personal ethics. personal hygiene. body structure and function. nursing arts. medical and surgical nursing. bacteriology. first-aid theory. maternal and child health. communicable and topical diseases (including community hygiene). English. arithmetic. drugs and their administration. and clinical practice. The content of each subject is outlined. the approximate number of hours devoted to each is indicated. and a few general guidelines for the instructor are included. (HC)

2516 Ethiopia, Ministry of Public Health. *Medical/surgical studies: elementary dresser training.* Addis Ababa. Ministry of Public Health. 1962. 36p. Engl.
Unpublished document: see also entries 2461. 2462. 2515. 2517. 2598. 2599. and 2600.

The medical/surgical content of the 1-year Ethiopian elementary dresser's course comprises units on skin diseases: musculoskeletal system diseases: circulatory system diseases: respiratory tract diseases: urinary tract diseases: gastrointestinal disturbances: malfunctions in the endocrine system: neurological diseases: eye. ear. nose. and throat diseases: reproductive system diseases: nutrition deficiencies: etc. The causes. symptoms. and treatment of each disease are explained in simple language: each unit is prefaced by a glossary of relevant terms. (HC)

2517 Ethiopia, Ministry of Public Health. *Hospital and personal ethics for the dresser.* Addis Ababa. Ministry of Public Health. n.d. 10p. Engl.
Unpublished document: see also entries 2461. 2462. 2515. 2516. 2598. 2599. and 2600.

This course aims to give the Ethiopian dresser (auxiliary health worker) an understanding of personal and professional ethics and government and international agency activities in health. the social and economic implications of illness. the rules and regulations that govern student behaviour while in school. the relation of the training institution to the total health activities. and the social consequences of some harmful traditions. Each of these topics is described and some advice on presentation is given. (HC)

2518 Niger, Ministere de la Sante Publique et des Affaires Sociales. *Programme de formation des infirmiers certifies. (Training programme for registered nurses).* Niamey. Ministere de la Sante Publique et des Affaires Sociales. n.d. 4p. Fren.
Unpublished document.

Certified nurses in the Republic of Niger undertake a 1-year course to prepare them for their future curative. preventive. educational. and administrative tasks. Coursework is aimed at providing them with the expertise to carry out treatment prescribed by a doctor or senior nurse. prescribe simple treatment in the absence of a doctor or senior nurse. refer difficult cases. manage a dispensary. participate in mass campaigns. take part in all health education campaigns. and train and supervise village-level health workers. The course itself consists of 560 hours of theory (general studies. anatomy. obstetrics. puericulture. administration. pathology. public health. pharmacology. etc.). 160 hours of technique. and 840 hours of monitored practice in general medicine. surgery. obstetrics. pediatrics. and infectious disease control. Fifty percent of the student's final mark is based on continuous evaluation and the other 50% on a final examination. Graduates may take another year to specialize in either public health or rural development. (HC)

2519 Nursing Council for Papua New Guinea, Port Moresby. *Syllabus: enrolled hospital nurse.* Port Moresby, Nursing Council for Papua New Guinea, Jan 1972. 50p. Engl.
Unpublished document: see also entries 2270. 2500. 2508. 2589. 2596. and 2618.

The enrolled nurse course in Papua New Guinea. which lasts 3 years. prepares students to provide nursing care within the hospital under the supervision of experienced nursing or medical personnel. The course is open to men and women over age 16 who have obtained a form II pass or equivalent. The syllabus comprises introduction to nursing: principles of medical. surgical. and psychiatric nursing: nursing techniques: administrative procedures: behavioural and social sciences: personal and community health: basic sciences: mathematics: English: obstetrics: and child health. Suggested minimum requirements for clinical experience are 42 weeks on the medical-surgical wards. 10

weeks in the outpatient department, 24 weeks in pediatric care, 16 weeks in obstetrics, and 4 weeks each in the operating theatre and maternal child health clinic. The other 30 weeks practice may be in any specialty – reflecting local needs and student interests. Course content and criteria for approval of training institutions are presented. (AC)

2520 **Oladeinde, C.I.** *School of Hygiene and Health Auxiliaries Training School, Eleiyele, Ibadan, Western State.* Nigerian Nurse (Lagos), 4(3), Jul 1972, 20-25. Engl.

A training school in Ibadan, Nigeria, provides courses for public health workers, sanitary inspectors, health sisters, health inspectors, community nurses, and dispensary attendants. Two of these courses, the health sisters diploma course and the community nurses course, prepare nurse-midwives to practice public health education and preventive medicine in both rural and urban settings. Admission to the 12-months health sister course is limited to experienced nurse-midwives, who are selected by their state governments. The curriculum, which comprises 9 months of theory and 3 months of field practice, includes sociology, psychology, health education methods, pediatrics, nutrition, and the principles and practices of public health nursing. Students must prepare a research paper and family case study and satisfactorily complete the final oral and written examinations. The community nurse course also stresses health education, but it primarily aims to prepare midwives to establish and promote disease prevention services through antenatal and infant clinics, home visiting, and group teaching. The course lasts for three 6-month terms during which students receive hospital experience, school lectures, and rural practice. Studies include maternal and child health, environmental sanitation, control of communicable diseases, family nutrition, accident prevention, public health education, and the role of the community nurse. (ES)

2521 **Pan American Health Organization, Washington, D.C.** *Guide for the training of nursing auxiliaries in Latin America.* Washington, D.C., Pan American Health Organization, Scientific Publication No.98, May 1964. 36p. Engl. Refs. Seminar on the Training of Nursing Auxiliaries, Cuernavaca, Mexico, 1-10 Dec 1963.

This guide was prepared with a view to establishing minimum standards for the training of the nurse auxiliary in Latin America. The following are among the principles or recommendations governing her training and deployment: training, which is the responsibility of nurse instructors assisted by nurses in service, should be no less than 9 months, should reflect a country's nursing needs, and should maintain a balance between "the skills and aptitudes required for the development of the student as a person and those required for carrying out her function"; students should be recruited and trained as close as possible to their future places of work; both student and curriculum should be constantly evaluated; training centres should be supervised by an official educational agency; standards should be defined and enforced by a national agency composed of nurses responsible for guiding the training and practice of nurse auxiliaries in accordance with the country's needs and resources; and a section on the training and practice of nurse auxiliaries should be introduced into the nursing legislation of each country. (HC)

2522 **Shah, P.M.** *Community participation and nutrition: the Kasa project in India.* Assignment Children (Geneva), 35, Jul-Sep 1976, 53-71. Engl.

In 1974, the Kasa Health Centre near Bombay, India, began recruiting part-time social workers from among the 56 364 inhabitants of the 60 villages it serves. Recruits received 4 weeks training and a monthly salary of approximately U.S.$10 to identify and assist at-risk children and mothers and to refer them, if necessary, to the centre. For this purpose, the social workers conduct clinics for children under 6 and expectant mothers under the supervision of an auxiliary nurse-midwife, keep records of the children's weight, and visit each married woman once a month for the purpose of detecting early pregnancy; they also advise on family planning. Nutritional activities include the distribution of food supplements, such as grams, groundnuts, brown sugar, and vitamin A, and the organization of health and nutrition programmes aimed at village women. The social workers also conduct census surveys and collect vital statistics, treat minor common illnesses, help in immunization campaigns, and chlorinate wells. As members of the community, they encourage village participation in related activities, i.e., road construction, and urge financial and other contributions, such as milk for children of mothers with lactation failure. The results so far have been promising. (RMB)

2523 **USA, Department of the Navy.** *Hospital corpsman 2 and 3: Navy training course.* Washington, D.C., U.S. Government Printing Office, 1967. 280p. Engl.

The first chapter of this training manual is devoted to information on advancing in the Navy and using the manual: chapters 2 through 9 contain the technical subject matter of a U.S. Navy course for hospital corpsmen. Subjects covered include basic anatomy and physiology; first aid, minor surgery, and emergency procedures; patient care; elementary pharmacology and toxicology; history taking and physical examinations; preventive measures; and self- and casualty-care during nuclear warfare. Although much of the information is particularly suited to armed forces personnel and conditions, principles and procedures of care are widely applicable. An index is included. (AC)

IV.3 Primary Family Planning and Midwifery Care

IV.3.1 Professional

See also: 2104. 2128. 2129. 2137. 2293. 2428. 2491. 2502. 2543. 2651. 2653. 2654. 2660. 2723. 2796

2524 **Cummins. G.T.. Vaillant. H.W.** *Training of the nurse-midwife for a national program in Barbados combining the IUD and cervical cytology.* In Berelson. B.. ed.. Family Planning and Population Programs: a Review of World Development. Chicago. University of Chicago Press. 1966. 451-454. Engl.

In an experimental programme in Barbados. three nurse-midwives were trained to insert intrauterine devices and take Papanicolaou smears. They receive 2 1/2 months training that consisted of an apprenticeship to an internist. experience in making ward rounds. classroom study. and experience in operating a clinic under indirect supervision. After completing training. the nurse-midwives each worked separately and independently with the help of a nurse assistant. The assistants. who were women with some training in nursing. performed ancillary tasks. Although the teams were not directly supervised. a doctor was always "on call" in case of emergency. After 3 months deployment. the team had taken 688 smears and performed 204 insertions and the demand for their services was increasing. These early results were encouraging. but follow-up evaluation was planned. (HC)

2525 **Federation of Family Planning Associations. Kuala Lumpur.** *Integration of family planning with the rural health services: course for senior supervisory personnel.* Kuala Lumpur. Federation of Family Planning Associations. n.d. 1v.(various pagings). Engl.

Unpublished document: see also entries 2275. 2289. 2302. 2531. 2532. 2533. and 2543.

Before health and family planning services were integrated in Malaysia. a course was held to reorient senior supervisory personnel from both services and to acquaint them with the implementation procedures and possible problems. Topics included the responsibilities of and relationship between the National Family Planning Board and each category of health worker. the need for family planning. the role of community participation in family planning. family planning as an integral part of maternal and child health. family planning and Ministry of Health policy. the concept of a team approach to supervising the integrated programme. the role and interrelationship of each category of health worker in the programme. training implications of the programme. and record keeping and evaluation procedures. The course programme is appended. (HC)

2526 **International Confederation of Midwives. London. American College of Nurse-Midwives. New York. Forman. A.M. Fischman. S.H. Woodville. L.. ed(s).** *New horizons in midwifery.* London. International Confederation of Midwives. 1973. 229p. Engl.

Sixteenth Triennial Congress of the International Confederation of Midwives. Washington. D.C.. 28 Oct-3 Nov 1972.

Papers presented at the 1972 conference of the International Confederation of Midwives dealt with new horizons in midwifery. including maternity care in developing countries: effects of technology on the quality of childbirth. with examples from European countries: implications of new knowledge in nutrition for maternal and child care: important issues in planning for maternity services: various aspects of family planning: and legislation affecting midwifery in the USA. Europe. and Liberia. The proceedings of the conference are included. with reports from several ICM project committees and representatives. Some papers contain statistical data. Appendices list participating organizations and personnel. (RMB)

2527 **International Federation of Gynaecology and Obstetrics. London. International Confederation of Midwives. London.** *Sage femme et la sante familiale: rapport du seminaire francophone Ouest Africain. (Midwife and family health: report of the French-speaking West Africa seminar).* London. International Federation of Gynaecology and Obstetrics. 1975. 181p. Fren.. Engl.

West African Seminar on the Role of the Midwife in Integrated Family Health Services. Dakar. Senegal. 17-23 Nov 1974.

See also entry 2382.

Midwives from the Ivory Coast. Dahomey (Benin). Mali. Mauritius. Niger. and Togo met to discuss the current status. job descriptions. and training of midwives of all categories in their respective countries: to identify common needs and problems in the field of maternal and child health. e.g.. nutrition. family planning. health education. and health care delivery: to consider appropriate training: to define new curricula for midwives of various categories: to discuss the reforms (funding. legislative. etc.) necessary to implement the new curricula: and to draw up a working plan for implementing the recommendations of the seminar in each country. This report comprises the text of the papers presented during the seminar. syntheses of the group discussions that followed the presentations. the seminar report and recommendations. and the results of an evaluation of the seminar. The seminar recommended. among other things. strengthening the midwives' training in gynaecology. sex education. organization and administration. teaching methodology. communications. civics. and family planning. (HC)

2528 **Kaderbhai. F.A.** *Domiciliary midwifery in Mombasa.* Kenya Nursing Journal (Nairobi). 1(2). Dec 1972. 77-78. Engl.

The Lady Grigg Maternity Hospital in Mombasa. Kenya. offers a government-sponsored domiciliary midwifery service to multigravida women who have no history of obstetrical complications and whose living

conditions are suitable for home delivery. Patients attend antenatal clinics at the hospital and, after delivery, are cared for at home by student midwives and community nurses who also begin newborn immunizations. This service has reduced overcrowding in the hospital, increased infant immunization coverage, and taught students the concept of total family care. Some suggestions for improving it include providing regular and reliable transportation for staff, because many mothers deliver before the midwife can reach them; extending the service to other areas in Mombasa; urging closer liaison between the service, the hospital, and the school of nursing; and appointing a midwifery superintendent to coordinate activities. (RMB)

2529 Mojekwu, V.I., Kennedy, A. *Future community midwives.* Yaba, Nigeria, West African Economic Consultants and Social Research, 1974. 31p. Engl. 15 refs.
Annual Midwives Seminar, Jos, Nigeria, 5-8 Nov 1974.

In 1974, the Nigerian community nurse was officially retitled the community midwife because health officials assumed that her duties would consist principally of assisting at deliveries and providing postnatal care; this change is questioned by the authors, who contend that in reality the Nigerian midwife spends most of her time providing maternal child health services. They argue that at present nurses are not being properly trained due to Nigeria's reliance on British midwifery manuals and as an alternative they propose a radical reorganization of both the midwife's job description and training. In their opinion, the midwife should serve as a health educator and they list her specific duties in both maternal and child health. In addition, they maintain that the midwife should be taught to diagnose and treat the possible causes of symptoms such as infant cough, vaginal bleeding, anaemia, perineal itching, swollen ankles, shock, and convulsions. The training schemata or diagrams are provided for treating these and other health problems. (RMB)

2530 Morehead, J.E., ed(s). *Paramedical personnel in family planning: a creative partnership.* Boston, Mass., The Pathfinder Fund, 1974. 37p. Engl. 17 refs.

This monograph details training programmes that prepare paramedical personnel for clinical duties in family planning services. These include programmes operated by the Downstate Medical Center, New York; Clinique La Croix Bleue, Dakar, Senegal; and Los Angeles County Harbor General Hospital. The Downstate Medical Center, a unit of the State University of New York (USA), initiated its family planning training programme for nurse-midwives in 1966. Its emphasis is on training midwives from developing countries to manage family planning clinics. Lecture courses and clinic sessions for its 12-week programme are conducted in English, French, and Spanish. Since July 1971, the Clinique La Croix Bleue in Dakar, Senegal, has offered a 156-hour training programme in family planning services to registered midwives from French-speaking West Africa and it also has initiated a separate programme for nonprofessionals to become field-workers. Programme curricula emphasize the sociological and demographic as well as the clinical aspects of family planning. Since 1969, Los Angeles County Harbor General Hospital (USA) has been training nonphysicians to provide education, counseling, and health maintenance services in family planning, cancer screening, and prenatal care. Those completing the 12-24 week programmes are called women's health care specialists and function under legal statutes in the United States as physician's assistants. (Modified journal abstract.)

2531 National Family Planning Board, Kuala Lumpur. *Integration of family planning with rural health services: training courses for 1) medical officer of health, 2) medical and health officer, and 3) medical officer (training).* Kuala Lumpur, National Family Planning Board, n.d. 9p. Engl.
Unpublished document; see also entries 2275, 2289, 2302, 2525, 2532, 2533, and 2545.

A 3-week course given to Malaysian medical officers paved the way for integrating family planning with national health services. The objectives of the course were to give the participants a basic theoretical knowledge of family planning; to acquaint them with the family planning programme in Malaysia; to provide sufficient practical training to allow them to organize and conduct family planning services in their own areas; to demonstrate the responsibility of each category of health worker in the family planning programme, the place of family planning in maternal and child health, the concept of the "team approach," and the importance of community participation in the implementation of the family planning programme; to prepare participants to integrate services at the local level; and to prepare them for training responsibilities. The course devoted 16 1/2 hours to techniques in family planning. A more detailed breakdown of the course is appended. (HC)

2532 National Family Planning Board, Kuala Lumpur. *Integration of family planning with rural health services: training course for 1) public health sister, 2) public health nurse, 3) sister (training), and 4) staff nurse (training).* Kuala Lumpur, National Family Planning Board, n.d. 8p. Engl.
Unpublished document; see also entries 2275, 2289, 2302, 2525, 2431, 2533, and 2543.

This 3-week course was designed to prepare Malaysian nurses for their role in integrating family planning with health services. The course aims to give them a basic theoretical knowledge of family planning and the national family planning programme. It also provides information on setting up family planning services and training other paramedical staff in family planning. The topics covered include: male and female reproductive anatomy, contraceptive methods (pills, hormonal injections, intrauterine devices, traditional methods, sterilization, etc.), management of patients and clinical procedures, community family planning education,

teaching techniques, etc. A detailed breakdown of the subject matter is included in the appended programme. (HC)

2533 National Family Planning Board, Kuala Lumpur. *Family health project: the Ministry of Public Health midwife's training course, nurse's training course, and doctor's training course.* Kuala Lumpur, National Family Planning Board, n.d. 6p. Engl.
Unpublished document; see also entries 2275, 2289, 2302, 2525, 2531, 2532, and 2543.

Outlines of three 1-week courses designed to acquaint midwives, nurses, and doctors with their roles in the Malaysian family planning programme are presented. The courses cover: the relationship of family planning to maternal and child health, population and public health, anatomy and physiology, conventional contraception, the history of contraception in Asia, the intrauterine device, oral contraceptives, records maintenance, and communication in family planning. The doctor's curriculum contains sections on infertility and recent developments in contraceptives as well. (HC)

2534 Niger, Ministere de la Sante Publique et des Affaires Sociales. *Programme de formation des sages-femmes. (Training programme for midwives).* Niamey, Ministere de la Sante Publique et des Affaires Sociales, n.d. 15p. Fren.
Unpublished document.

A 3-year course has been specially tailored to the needs of the midwife in charge of the rural maternity hospital in Niger. The course aims, through a programme combining theory, demonstration, and practice, to develop in the student the sound judgment and self-confidence necessary for the independent, largely unsupervised position she will be occupying. The first year curriculum is identical to that of the state certified nurse and consists of 27% general knowledge (French, mathematics, psychology, etc.), 35.5% professional theory and technique (anatomy, physiology, pathology, etc.), and 37.5% practice in hospital wards and public health programmes. The 2nd year curriculum features theoretical and technical instruction in female anatomy, the mechanics of delivery, methods of health education, health-related legislation, professional ethics, abnormalities in the newborn, child development, maternal and child health in Niger, nutrition, etc., complemented by practice in maternity wards, pediatric wards, prenatal clinics, etc. The 3rd year concentrates on complications or abnormalities in obstetrics and is complemented by the appropriate practical work. Evaluation is conducted continuously and by means of state-set examinations. (HC)

2535 Nursing Council for Papua New Guinea, Port Moresby. *Syllabus: post-basic midwifery.* Port **Moresby, Nursing Council for Papua New Guinea, Jun 1971. 17p. Engl.**
Unpublished document.

This course on post-basic midwifery is open to those who have already qualified (and preferably practiced) as nurses in Papua New Guinea. It provides the student midwife with practice in caring for women during normal pregnancy, labour, and puerperium. It also covers abnormalities in pregnancy; health teaching; administration; a midwife's moral, ethical, and legal responsibilities; and human motivation. It aims to foster an attitude of responsibility toward continuing professional education and participation in community activities. The course comprises 336 hours of instruction complemented by 48 weeks practice and observation in antenatal clinics, hospital obstetrical wards, premature baby units, nurseries, family planning clinics, and rural health centres. A more detailed breakdown of subjects, a timetable, and some information about the criteria for offering midwifery training are included. (HC)

2536 Rojas Ochoa, F., Cabezas Cruz, E., Duyos Gato, H. Cuba, Ministerio de Salud Publica. *Atencion a la embarazada y al recien nacido en Cuba. (Care of the pregnant woman and the newborn in Cuba).* Havana, Centro Nacional de Informacion de Ciencias Medicas, Ministerio de Salud Publica, Jun 1976. 65p. Span.
Eighth Latin American Congress on Obstetrics and Gynaecology, Havana, Cuba, 25-31 Jan 1976.

In 1970, the Cuban government introduced a national maternal and child health (MCH) plan. It aimed to reduce infant mortality to 25 per 1 000 live births, stillbirths to 12 per 1 000 live births, perinatal mortality to 27 per 1 000 live births, maternal mortality to 2 per 10 000 live births, and the incidence of miscarriage in general. This booklet describes the integration of MCH services into the general health services and the organizational and administrative changes this entailed, the pediatric and obstetric norms that were introduced throughout the country, the additional facilities that were established for MCH and the training requirements of the personnel introduced to staff them, and the research that was carried out to determine the causes of infant and maternal mortality. After 4 years operation, the plan had succeeded in improving the quantity and quality of MCH services and facilities and in lowering the maternal mortality to 5.6 per 10 000 live births and the infant mortality to 28.9 per 1 000 live births. Twenty-five tables of statistical data are appended. (HC)

IV.3.2 Nonprofessional

See also: 2104, 2125, 2129, 2174, 2293, 2301, 2340, 2491, 2522, 2526, 2530, 2613, 2629, 2649, 2650, 2653, 2656, 2657, 2658, 2723, 2796

2537 Abdullah, H.Z., Lan, K.E., Hussain, W.K., Goey, L.K. *Problems and findings from the TBA*

program in Malaysia. In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 69-73. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
For complete document see entry 2545.

The National Family Planning Board of Malaysia selected a number of previously trained traditional birth attendants (TBAs) to act as family planning motivators. These TBAs were chosen from areas where there were already a number of trained TBAs, clinical services, relatively short distances from the health facilities to the TBAs' base, a good relationship between the TBAs and the health staff, etc. Only TBAs who were popular with the people were eligible. It was noted that the initially large number of TBA-recruited acceptors diminished as time went by, probably because the TBAs had to move further and further afield to find new recruits and, as their follow-up workload increased, they had less time to spend in actively seeking acceptors. Despite some problems – such as the recruitment of a number of already practicing or pregnant acceptors and the spread of rumours by nonparticipating TBAs – the programme was deemed worthy of continuation. It is recommended, however, that more time be allocated for TBA refresher courses; that TBAs be encouraged to emphasize the health aspects of family planning, especially to new mothers; that rumours prevailing in the community be reported; that TBAs be urged to participate in all information/education activities conducted by the board; and that TBAs be encouraged to spend more time with new clients. Reports written by staff nurses from three areas where the programme was implemented – Malacca, Kotu Baru, and Perlis – follow. (HC)

2538 **Arora, P.** *Dai centre experiment.* Nursing Journal of India (New Delhi), 67(12), Dec 1976, 289-292. Engl.

Under the auspices of a comprehensive rural health services project in Ballabgarh, India, a trained dai has been given responsibility for running an extension **health centre for four villages with a population of 4 586. Her duties are to register all pregnant women, attend** deliveries, record vital statistics, vaccinate newborns against smallpox, immunize pregnant women against tetanus, assist with aa general clinic once a week, and encourage family planning acceptors. She coordinates her work with aa basic health worker posted at the centre and travels with ahim to the outlying villages. Her qualifications, which are deemed especially appropriate for the scheme, include literacy in Hindu, satisfactory completion of a 9-month training course for dais, and 5 years experience in a primary health centre. She has been equipped with aa home-visiting bag that contains writing material, drugs such as nebasulpha powder and sulphadiazine tablets, scissors, syringe, condoms, etc. Thus far, this setup has proved economical and compares favourably with aa similar plan employing both a trained dai and an auxiliary nurse-midwife to manage an extension centre. Forms for recording statistics on maternal child health, family planning, and deaths are appended and a monthly report is included. (AC)

2539 **Asavasena, W.** *Traditional birth attendants in Thailand.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 27-28. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
For complete document see entry 2545.

An estimated 60-70% of all rural deliveries in Thailand are conducted by traditional birth attendants (TBAs) and several factors strongly recommend their continued utilization: their prominence in the community and their familiarity with the expectant mothers, the fact that their clients lack access to a governmental health or midwifery centre, and the fact that home delivery facilitates the performance of the necessary rituals marking the birth of the baby. Over the past 20 years, attempts have been made to improve the care provided by TBAs through 2-week training courses on sterile delivery technique and maternal child health and nutrition. Upon completion of a course, trainees, who now number about 16 000, receive UNICEF midwifery kits. The Ministry of Health intends to continue operating refresher courses for TBAs and to integrate them into the family planning programme. The activities of the TBAs will be supervised by the nurse/supervisor of each province and the necessary reporting and referral systems established. (HC)

2540 **Bayan, F.B.** *Traditional birth attendants in the Philippines.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 23-25. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
For complete document see entry 2545.

Traditional birth attendants (TBAs) or *hilots* in the Philippines are respected and influential leaders in rural and *barrio* society. In addition to midwifery, their activities may include folk healing, massage, marriage counseling, etc. and, in some areas, screening patients for referral to orthodox medical practitioners. Although TBAs would seem ideal promoters of family planning in view of their social prestige and contact with new mothers, a study of TBA attitudes toward having children revealed a strong pronatalist bias: 41% of the TBAs interviewed had six or more children; 38% would want to have the same number of children if they could start again; and 20% would want more.

Nonetheless, a pilot project utilizing TBAs as family planning monitors was initiated with rather favourable results: each TBA referred an average of 27 acceptors per month while non-TBA motivators referred fewer than 20. However, when a more sophisticated reporting system was introduced, TBA referrals declined in number due to the increase in paperwork. It was concluded from this limited trial that sustained supervision and simple procedures in training, recording, and reporting are essential to the successful deployment of TBAs in a family planning programme. (HC)

2541 **Dean, M.** *Nurse-midwife: a "multipurpose worker".* Nursing Journal of India (New Delhi), 67(4), Apr 1976, 91-92. Engl.

The author recommends that the nurse-midwives in India be offered post-basic training to become family health nurse practitioners. She notes that a study of the practice of nurse-midwives revealed that few were using the skills acquired in training. Most of them were working in hospitals and only a small pereentage were practicing midwifery. She contends that this is an underutilization of the nurse-midwives' skills and that they should be used to extend the country's maternal child health services into rural areas. Thus, she urges more comprehensive training for nurse-midwives to prepare them for duties in family planning, health education, immunization, and vital statistics. She also suggests that the upgraded nurse-midwives be made head of teams of social workers, vaccinators, and midwives. (AC)

2542 **del Mundo, F.** *Problems and findings from the TBA program in the Philippines.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 55-60. Engl.

Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.

For complete document see entry 2545.

A total of 482 traditional birth attendants (TBAs) or *hilots* were trained at three different sites in the Philippines as part of a project to evaluate their suitability as family planning motivators. Factors such as incentive and supervision were varied at each of the three sites to determine their relative effects on performance. Over the next 15 months, the following observations were made: TBAs can become involved in family planning motivation despite its seeming conflict with their traditional work and both adequate supervision and financial incentives encourage them to recruit new birth control acceptors, but the age, low educational level, and short interest span of the TBAs necessitates "exceptional" training efforts. Transportation difficulties and the side effects that accompany some methods of birth control are major deterrents to both TBAs and acceptors. Other problems include the lack of adequate stipends to cover TBAs' expenses, the failure of many TBAs to follow up acceptors, and the disinterest shown by other family planning and health staff. Nonetheless, the value of the TBAs' credibility, prestige, and respect in their own communities is recognized and it is concluded that simplified, lively training with more stress on incentives and competent, sensitive supervision for TBAs would go a long way toward overcoming these problems. (HC)

2543 **Federation of Family Planning Associations, Kuala Lumpur.** *Outline of training courses for various categories of medical/health personnel and L.P.K.N. staff.* Kuala Lumpur, Federation of Family Planning Associations, Nov 1972. 8p. Engl.

Unpublished document; see also entries 2275, 2289, 2302, 2525, 2531, 2532, and 2533.

Integrating family planning into the health services is the aim of these 15 courses for health personnel in Malaysia. Course time ranges from 15 hours (refresher courses for National Family Planning Board staff) to 140 hours (first course for new staff at NFPB). Basic courses include national policy, socioeconomic background, history, contraceptive methods, and an introduction to the information programme. Other content varies with the perceived role of the cadre and a certificate of participation is awarded for completion of most of the courses. An outline of the type and category of staff, the objectives of each course, theory, practice, discussions, etc., is provided. (AC)

2544 **Go, A.S.** *Outlook and future research in the Philippines TBA program.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 95-97. Engl.

Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.

For complete document see entry 2545.

On the premise that the future of the traditional birth attendant (TBA) in family planning and health care delivery in the Philippines and other countries of South East Asia will depend upon the willingness of administrators to try new strategies, the author suggests topics for future research. These include studies on the relationship of the TBAs to the community and other health workers, the output that can reasonably be expected from a TBA in family planning, the harmful and harmless traditional practices of TBAs, the problem of supervising TBAs, etc. One research project, which aims to determine the safety of utilizing TBAs in prescribing the pill, recruiting new acceptors, improving continuation rates, and making referrals, is already under way. Seventy-five TBAs who have completed a basic training course are to receive 6-days training. They will learn procedures for pill distribution by a checklist method and will become acquainted with the use of coupons to replenish supplies. They will be allowed to charge a fixed amount per cycle. Their performance will be compared with that of TBAs who are already practicing in control areas but who have not

received the 6-day course. The project, which will take 9 months, will be evaluated after 6 and 9 months. (HC)

2545 **International Development Research Centre, Ottawa. Peng, J.Y. Keovichit, S. MacIntyre, R., ed(s).** *Role of traditional birth attendants in family planning.* Ottawa, International Development Research Centre, 1974. 107p. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
Individual articles have been abstracted separately under entries 2537, 2539, 2540, 2542, 2544, 2547, 2548, 2550, 2551, 2552, 2553, 2556, 2557, 2559, and 2561.

Papers that were presented at two seminars in South East Asia on the utilization of traditional birth attendants (TBAs) as family planning promoters are grouped under the following: national experience, implementation of family planning programmes, lessons from the operation of the programmes, and outlook for the future. Discussions that followed the papers are summarized and the recommendations that were forthcoming are set forth. They call for TBAs to be integrated rapidly into both family planning and maternal and child health programmes. Other recommendations are that each country take an official position on the utilization of TBAs in family planning, that all TBAs be trained in maternal and child health and family planning, that a good supervisory system be established to monitor the work of the TBAs, and that regional cooperation for planning, operation, and evaluation of TBAs in family planning be pursued. (HC)

2546 **Keovichit, S., Nomsiri, C., Suvanavejh, C., Sangchai, R.** Mahidol University, Mahidol. Thailand, Ministry of Public Health. *Preliminary report on the study of utilization of Mohtamyae in family planning program.* Bangkok, Ministry of Public Health, Jun 1974. 22p. Engl.

A study undertaken in 1973 was designed to determine the most effective way of incorporating *mohtamyae* (traditional birth attendants) into Thailand's maternal child health and family planning services. Four rural provinces were selected for study and their practicing *mohtamyae* were identified by the provincial health officers. A total 136 *mohtamyae* and 1 263 eligible women in the provinces were interviewed by nursing students from Mahidol University about knowledge, attitudes, and practices in family planning and childbirth. The *mohtamyae* from one province served as a control group; the remainder were given one or more of three dependent variables – training, incentives, and cooperation with village leaders. Training was 4 days and covered general family health problems; the population problem; review of anatomy and physiology of reproductive organs; problems of childbirth in rural Thailand (including a demonstration of home delivery); methods of birth control and their contraindication, effectiveness, etc.; selection of acceptors; cooperation with village leaders; ways to motivate acceptors; the *mohtamyea's* role in the family planning programme; and the advantage of integrating family planning in maternal child health. Filmstrips and group discussions supplemented the teaching. Follow-up evaluation is planned and the results of the initial interview are set forth. (AC)

2547 **Keovichit, S., Nomsiri, C.** *Implementation of family planning program in Thailand.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 43-49. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
For complete document see entry 2545.

The National Family Planning Board of Thailand established a pilot project to determine the best way of training and deploying traditional birth attendants (TBAs) as family planning motivators. The target group were generally middle-aged and illiterate; they had low incomes and practiced midwifery in addition to some other occupation. They were well-respected in the community and already exhibited a considerable knowledge of family planning. Three approaches, each using a different combination of three factors – training, incentive, and working with the community leader – were attempted and a control group observed. Although the programme had not yet been completely evaluated at the time of this writing, the following observations were made: TBAs can be trained as motivators of family planning; a TBA's age may be a limiting factor to active motivating; an effective training course should be short, simple, informal, and conducted in the local language; refresher training should be given 4-5 months after initial training; close cooperation between the TBAs and the local health worker is desirable; and local community leaders can create awareness of the need for family planning and refer women to the TBA. Samples of a TBA training curriculum, recruiter coupon, and list of incentives are appended. (HC)

2548 **Mangay-Angara, A.** *Implementation of family planning program in the Philippines.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 37-40. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
For complete document see entry 2545.

The *hilot* or traditional birth attendant (TBA) teaching programme was begun in the Philippines in 1954 as a part of the country's midwifery training programme. Its objectives have been to improve the quality of the services rendered by TBAs by teaching them the importance of clean hands and equipment, when to call a doctor or nurse-midwife, etc., and by bringing them under the supervision of trained personnel. Training is

conducted by a provincial nurse-supervisor in a series of 12 3-hour weekly classes. Upon successful completion of the course, each TBA is given a UNICEF midwifery kit; her subsequent practice is supervised monthly by health centre staff. Observations over the past 20 years have revealed that services of the TBA are still popular and that when trained and supervised by rural health unit personnel she provides better care and has high morale. Increasingly, TBAs are becoming involved in recruiting and organizing mothers' classes, assisting in birth registration, helping to bring in children for immunization, motivating mothers toward family planning, following up family planning acceptors, etc. The government plans to phase out the services of the TBAs in midwifery, as more trained staff become available, in favour of their increased deployment in the above-mentioned health-related activities. (HC)

2549 **Nunez, C.A.** *Family planning: a new role for the hilot.* Reproductions (Manila), 3(38), Nov 1974. 2p. Engl.

In 1974, there were 31 200 practicing *hilots* or traditional birth attendants in the Philippines, a ratio of 1 per 1 300 population, considerably higher than the physician-population ratio of 1 to 5 000. Because of the *hilots'* numbers, the nature of their work, and their respected positions within their own communities, family planning organizations have been eager to transform them into family planning motivators. However, the *hilots'* success in this field has been hindered by their age, limited educational background, and general lack of interest in family planning. *Hilots* who are past childbearing age themselves are often viewed with suspicion by younger mothers and may lack the energy to conduct a full-scale family planning campaign. Their low educational levels make it difficult for them to keep up with the required paperwork and to understand sophisticated concepts, such as the relationship between population and natural resources. Finally, methods other than financial remuneration must be found to encourage the *hilots* in an endeavour that is essentially in opposition to their own professional interests. (RMB)

2550 **Peng, J.Y.** *Traditional birth attendants in Malaysia.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 21-22. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
See also entries 611 (volume 1) and 2545 for complete document.

A 1972 study of traditional birth attendants (TBAs) revealed that an estimated 3 000 TBAs attended 31% of all births in Malaysia, the mean age of TBAs was 47 years, 80% had no schooling, 70% had learned their craft from women relatives or friends, a TBA attended an average 3 deliveries a month, and their average charge per delivery was 5.4 Malaysian dollars (about U.S. $2). Almost 100% of the TBAs approved of family planning for married women, 99% said that they were not worried about family planning affecting their practice, and 95% thought that they could help to promote the government's family planning programme by recruiting acceptors and distributing contraceptives. It was concluded that TBAs could indeed be utilized in the national family programme and a "well-organized system of operation and close supervision" has since been implemented. (HC)

2551 **Peng, J.Y.** *Outlook and future research in the Malaysian TBA program.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 89-93. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
For complete document see entry 2545.

In an intensive 3-day training course, traditional birth attendants (TBAs) in Malaysia learned the procedures for recruiting new family planning acceptors, remotivating programme dropouts, and supplying oral contraceptives to existing acceptors. The procedures were simplified into several steps: finding the acceptor, giving her a yellow coupon and sending her to the clinic for service, resupplying her with pills, seeking out those who fail to come for resupply, and meeting with the clinic nurses every month. The monthly meetings constituted a supervisory channel, a chance to distribute allowances and bonuses, and a forum to discuss problems and successes. Although the recruitment rate was lower than expected (an average 5 new acceptors per month instead of 10), the resupply rate was high, often to the point of taxing the TBAs' strength. The author concludes that the programme should be continued in view of the encouraging resupply rate and the poor prospects for better-trained personnel. He recommends that regional cooperation for a standardized programme be pursued. (HC)

2552 **Phijaisanit, P.** *Outlook and future research in the Thailand TBA program (part 2).* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 83-86. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
See also entries 2545 for complete document and 2557.

Some solutions to problems in the deployment of traditional birth attendants (TBAs) in Thailand's family planning programme are discussed. Problems concern the classification, training (particularly for illiterate TBAs), supervision, and motivation. The proposed solutions are that TBAs be classified as information disseminators, communicator/motivators, contraceptive distributors, or rumour identifier/correctors according

to their levels of education and enthusiasm; that they be taught by means of small group discussions, audio-visual aids, role playing, demonstrations, field practice, etc. conducted in the vernacular; that they be allowed upward mobility through refresher courses; that they be supervised by village headmen in view of the poor relationship between TBAs and government health personnel; and that incentives such as free medical supplies, recognition, free health services for their families, etc. be preferred over monetary incentives. (HC)

2553 **Poerwodihardjo, S.** *Traditional birth attendants in Indonesia.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 17-20. Engl.

Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.

For complete document see entry 2545.

Since the early 1950s in Indonesia, attempts have been made to register traditional birth attendants, who attend 37% of all live births, and train them in techniques of safe delivery. More recently, training programmes have been introduced to recruit them as family planning motivators. These have been designed to increase the TBAs' awareness of the importance of family planning and to obtain their cooperation and participation. It was hoped that TBAs would undertake reporting, disseminating information, escorting acceptors to the clinic, and distributing condoms. Peformance figures for referrals, however, have been disappointing – only two or three per month, made by only a small portion of the total number of trained TBAs. In addition, the number of referrals declined a short time after training (initial success probably being due to the existence of a small, already-motivated group within the community). Despite this poor performance record, the author urges that the government continue trying to secure at least the passive endorsement of the programme by the TBAs, lest they become formidable obstacles to the family planning programme. (HC)

2554 **Rosenfield, A.G.** *Training of paramedics to prescribe oral contraceptives and to insert intrauterine devices.* Bangkok, Population Council, 31 May 1971. 6p. Engl.

Unpublished document.

Family planning auxiliaries can and should be utilized to insert IUDs and prescribe oral contraceptives, but their training must properly prepare them for this role. Their curriculum should include general population dynamics, basic anatomy and physiology of human reproduction, a review of all methods of contraception (mechanisms of action, contraindications, complications, and side effects), techniques of motivating acceptors, and follow-up procedures. Trainees, if possible, should be selected from people who have already had 2 years experience in maternal child health and should be chosen from clinics where it is anticipated that 20 IUD insertions will be required monthly. They should serve an internship for at least 2-3 months, during which time they should perform about 30 pelvic examinations and 20 IUD insertions under close supervision. A checklist for prescribing oral contraceptives and inserting IUDs should be available and a manual should be prepared in the local language and given to every worker. (AC)

2555 **Sillonville, K.** *Accoucheuses de village. (Village midwives).* Afrique Medicale (Dakar), 9(79), Apr 1970, 341-346. Fren.

To reduce high maternal and infant mortality in a rural area of Cameroon, a training programme was launched for village midwives to prepare them to conduct prenatal examinations, deliver infants, recognize and refer dangerous cases, and promote good nutrition. The village midwives were experienced women who were chosen from remote villages by health workers with the approval of their communities. Their 4-week training course at the district health centre included practice and theory of hygienic delivery, prenatal care, and nutrition counseling. On completing the course, the village midwife received a small kit of sterile equipment, including soap and bandages. When she returned to her village, she recorded deliveries and provided important vital statistics to the health centre. The programme's success in winning public approval suggests its practicality and effectiveness in utilizing traditional birth attendants for modern medical practices. (ES)

2556 **Subbiah, M.** *Implementation of family planning program in Malaysia.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 33-36. Engl.

Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.

For complete document see entry 2545.

In keeping with its policy of integrating family planning with health services and utilizing all available channels, organizations, and individuals to propagate the concepts of planned parenthood, the National Family Planning Board of Malaysia developed an action-oriented project to determine the extent to which traditional birth attendants (TBAs) could be utilized in family planning programmes without jeopardizing their source of income. TBAs were given 2 1/2 days instruction in the following procedures: finding eligible acceptors, giving them a yellow coupon, and sending them to a clinic for examination and their first packet of pills; distributing additional packets of pills in exchange for green coupons given out six at a time by the clinic; and visiting acceptors who do not return for resupply. Monthly meetings were planned in specific clinics for payment (30 units Malaysian currency, plus a bonus after performance is assessed), supplies, and reporting of rumours, etc. By the end of 1973, 4 235 acceptors had been recruited and rates of those continuing family planning were encouraging – 72, 68, and 56% after 12, 18, and 24 months respectively. Of the

181 TBAs originally enrolled in the project, 150 were still active in May 1974. The project, first implemented in two Malaysian states, was expanded to all but two by April 1974 and funds for its continuation had been requested. (HC)

2557 **Suvanavejh, C., Phijaisanit, P.** *Outlook and future research in the Thailand TBA program (part 1).* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 79-81. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
See also entries 2545 for complete document and 2552.

In view of the success of training programmes for traditional birth attendants (TBAs) in maternal and child health (MCH), the government of Thailand has experimented with involving these women in the area of family planning (FP). Research conducted in four areas of the country revealed that they are able to recruit young rural women as FP acceptors and that they are effective agents of change. Their potential activities include acting as supply agents for contraceptives, assisting government personnel by correcting false rumours about contraception, bringing dropout acceptors back into the programme, registering vital statistics, etc. However, before the TBAs can be fully utilized in an integrated MCH/FP programme, a number of questions must be answered: are they able to influence women of a higher socioeconomic background? What degree of community support would maximize their performance? What degree of supervision do they require? How best can they be trained and how can the problem of their illiteracy be overcome? What effect will incentives have on their performance? Do they spread negative rumours about the side effects of contraceptives? Do they relate FP activity to MCH? To what extent can they influence potential male acceptors? What is the difference between the attitude toward the use of contraceptives by TBA- and non-TBA-motivated acceptors? A number of research projects are planned to shed light on these areas. (HC)

2558 **Taeger, A.** *Maternal care: need for ante-natal care.* **In Cruikshank, R., Standard, K.L., Goldthorpe, G. Cook, R., eds., Manual for Community** Health Workers, Mona, Jamaica, University of West Indies, Department of Social and Preventive Medicine, 1968, 119-129. Engl.
See also entries 569 (volume 1), 2454, 2455, 2582, 2583, 2597, and 2634.

To prepare Jamaican community health workers to provide maternal care, this chapter of their manual explains the normal symptoms of pregnancy and the importance of antenatal clinic visits. It advises on personal hygiene during pregnancy, especially proper clothing and exercise; diet supplements that can be obtained through local, nutritious foods; and prevalent minor ailments, such as varicose veins, heartburn, cramp, headache, and vomiting. The three stages of labour are explained and the importance of postnatal rest and examination is stressed. (ES)

2559 **Vejamon, U., Sangchai, R.** *Problems and findings from the TBA program in Thailand.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 61-64. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
For complete document see entry 2545.

A 2-year pilot project on the training and utilization of traditional birth attendants (TBAs) in family planning was conducted in Thailand to identify deterrents to the acceptance of birth control measures. The characteristics of the TBAs, the acceptors, and the clinic health personnel were examined and these observations were made: motivation on the part of TBAs was a function of age, mobility, and educational level; a monetary incentive did not necessarily increase TBA productivity, but it often helped to allay prohibitive transportation costs; distance and hours of clinics presented obstacles to working acceptors; the lack of an alternative method of birth control – rumours about the side effects and the effectiveness of the pill were rampant – discouraged some acceptors; a lack of sympathy on the part of some clinic staff discouraged others; etc. To counteract these factors, these suggestions were made: that TBA training be made more comprehensive and more frequent and that TBAs be grouped according to their ability, that a more suitable incentive scheme for TBAs be developed, that a more understanding attitude on the part of health personnel be nurtured, and that clinics be opened evenings for working acceptors. (HC)

2560 **Verderese, M.de L., Turnbull, L.M.** WHO, Geneva. *Traditional birth attendant in maternal and child health and family planning: a guide to her training and utilization.* Geneva, WHO Offset Publication No.18, 1975. 111p. Engl., Fren. Refs.

This guide to incorporating the traditional birth attendant (TBA) into the health care system of a developing country discusses the definition, profile, current practices, and potential role of the TBA. It also reports the objectives, methods, and findings of a 1972-1973 WHO survey of the TBA's role in maternal and child health and family planning, suggests strategies for involving the TBA in existing programmes, and recommends ways to enlist community support. The methods, teaching aids, evaluation techniques, and content of TBA training courses are also included as are problems of TBA supervision, including the supervisory organization within the health care system, supervisory functions of the various health personnel involved, skills needed to perform supervisory functions, planning for better results, etc. Finally, methods for evaluating the TBA's performance within the health care system are discussed. It is strongly recommended that

developing countries regulate TBA practice, urge other health workers to understand the TBAs' culture and the rationality of their practice, and design an effective system of training for TBAs. (HC)

2561 **Wasito, R.** *Problems and findings from the TBA program in Indonesia.* In Peng, J.Y., Keovichit, S., MacIntyre, R., eds., Role of Traditional Birth Attendants in Family Planning, Ottawa, International Development Research Centre, 1974, 65-67. Engl.
Seminar on the Role of Traditional Birth Attendants in Family Planning, Bangkok, Thailand, and Kuala Lumpur, Malaysia, 19-26 Jul 1974.
For complete docment see entry 2545.

An investigation of the performance records of 127 Indonesian traditional birth attendants (TBAs) who had received some training in family planning motivation revealed an initial high rate of recruitment activity followed by a rapid decline. This decline could be due to the physical effort required of these elderly women in recruiting acceptors, because between 12 and 30 visits were needed to convince one acceptor to come to the clinic. Although performance might be improved by introducing monetary incentives, refresher courses, better supervision, etc., the importance of the TBA in family planning promotion will depend upon the approach prevailing in her region: if the "individual approach" prevails, her contribution – especially where there is a dearth of trained field-workers – could be significant; if, however, the "mass approach" prevails, her efforts will be lost among the more far-reaching contribution of village administrators and religious leaders. (HC)

IV.4 Primary Dental Care

IV.4.1 Professional

See also: 2564

2562 **Papua New Guinea, Department of Public Health.** *Port Moresby Dental College academic handbook: 1972.* Port Moresby, Port Moresby Dental College, 1972. 69p. Engl.
Unpublished document.

Port Moresby Dental College, Papua New Guinea, trains dental officers, fully-qualified professionals capable of independent practice; dental therapists, upper-level auxiliaries employed by the public health service to perform routine treatment in schools and emergency services under indirect supervision; and dental technicians, auxiliaries who carry out prosthetic procedures such as construction of dentures, inlays, and crowns. Although classes are conducted separately for the three groups, clinical tasks, laboratory assignments, field excursions, and community projects are undertaken together. Thus each student previews his future role in the dental health team. The syllabi and class schedules are presented and the College's history, admission requirements, teaching methods, clinical organization, student evaluation procedures, refresher courses, facilities and equipment, etc., are included. (HC)

2563 **Restrepo-Gallego, D.** Pan American Health Organization, Washington, D.C. *Considerations in the formulation of national dental health plans.* In Boletin de la Oficina Sanitaria Panamericana: English Edition Selections from 1968, Washington, D.C., PAHO, 1969, 65-73. Engl.
Also appeared in Spanish in Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 65(5), Nov 1968, 423-433.

The historical development and the present role of the dental profession in Latin America are examined. The author laments that the profession is "more inclined to analyze the effect than the cause, to deal with the disease rather than the patient, and to pay little attention to the environment in which it operates." Thus, it fails to fulfill its social function of service to the community and this failure is reflected in the community's negative attitude toward dentistry. To improve its image and to extend the benefits of its services, the profession is urged to adopt a strong stand in favour of prevention, delegate tasks to auxiliaries, formulate preventive techniques that can be performed by auxiliaries, and establish professional fees based on the service rendered, not the educational level of the individual administering it. (HC)

IV.4.2 Nonprofessional

See also: 2104, 2142, 2244, 2562, 2563

2564 **Alloy, E., Alloy, J.** *Dental care in China mixed costs: zero to negligible.* Hamdard Medicus (Karachi), 19(7-12), Jul-Dec 1976, 110-112. Engl.

Dental health services are at present a weak spot in the health care system of the People's Republic of China due to shortages of facilities, equipment, and manpower. However, the government is now in the process of training numerous dental auxiliaries, who will be the dental equivalent of the medical barefoot doctor. There are also two levels of professional dental health workers: stomatologists, who receive 10 years of secondary and 3 1/2 years of college instruction, and dental technicians, who attend special training schools for 6 months to 3 years. One long-range plan is to establish dental clinics on every commune, but, in the meantime,

mobile dental units provide services to many communes. Orthodontia for cosmetic reasons is discouraged and prevention is stressed. Acupuncture and acupressure are the major techniques for the control of pain during dental extraction. A small fee-for-service is charged for dental procedures – for example, a cleft palate can be repaired for U.S. $5 and dental manpower receive a portion of that payment. (RMB)

2565 Goh, S.W. *Extending the functions of a staff nurse (dental) in the public dental service.* Singapore, Singapore Dental Association, 27 Feb 1974. 9p. Engl.
Unpublished document; paper delivered at the outgoing council dinner of the Singapore Dental Association.

In February 1974, the functions of dental nurses in Singapore were extended to include primary dental care for all schoolchildren and greater practice freedom. The move was prompted by an extraordinary shortage of professional dental personnel brought about by immigration and low dental student admissions. The Singapore Dental Association acknowledged the need for the extension but called for the move to be considered an emergency measure that would be reviewed by government and revoked as soon as more professional personnel were available. Most of the dental nurses' duties, which had been in effect before, remained unchanged. These included keeping records up-to-date, maintaining clean equipment and clinic space, preparing and inserting fillings, performing simple extractions, applying dressings for pain, capping exposures, providing instruction in oral hygiene, treating simple gum conditions, and scaling and polishing teeth. (AC)

2566 Kelman, A.M. Israel, Ministry of Health. *School dental services in Israel.* Science Education Bulletin (San Mateo, Cal.), 6(1), 1973, 15-18. Engl.

Although its dental health division was not established until 1971, the Israeli Ministry of Health has sponsored sporadic dental health services for primary schoolchildren since 1948. However, in 1973, of some 660 000 schoolchildren, fewer than 60 000 were receiving satisfactory and comprehensive dental care due to a lack of dental manpower and equipment. Moreover, the few available school dentists spent more than half their time giving first aid and treating complications arising from neglect. To combat these problems, the author designed an 8-year programme of dental care based on preventive principles, such as health education, early treatment, and the fluoridation of drinking water. At the end of that time, 90 full-time dentists should be working in the school dental service with a capability to treat some 360 000 schoolchildren effectively. Because of the considerable shortage of manpower, the author also suggests the training and deployment of dental auxiliaries. (EE)

2567 Kennedy, D.P. WHO, Geneva. *New Zealand's dental auxiliary programme.* WHO Chronicle (Geneva), 25(1), Jan 1971, 65-69. Engl.
Also published in French, Russian, and Spanish.

Since 1921, the Department of Health in New Zealand has been training dental health nurses for deployment in schools. These nurses are given a 2-year course that prepares them to examine patients, maintain records, undertake procedures in preventive dental care, fill cavities in permanent and deciduous teeth, and extract teeth under local anaesthetic. In addition, they receive training in the principles of teaching so that they may give classroom instruction in dental health. The success of the programme in conserving teeth is reflected in a reduction of extractions from 88.2 to 12.6 per 100 children in 36 years. To complement the work of dental health nurses and to lessen the workload, fluoridation has been introduced and is credited with lowering the cavity-count in children so that one nurse can now provide 700-1 000 children with regular care. Since 1949, New Zealand has assisted 20 countries and territories in setting up similar programmes and is willing to provide information and material to others. (HC)

2568 Ocampo Alvarez, A., Hakim Dow, E., Chavez Jaramillo, O., Pauly S., R., Arango Tamayo, J., Estefan Estefan, A., Aristazabal Acosta, A., Wessels, K.E. *Personal auxiliar en odontologia. (Auxiliary dental personnel).* Boletin de Odontologia (Bogota), 32, Apr 1966, 88-104. Span.

In 1965, a questionnaire was sent to dentists and dental associations in Latin America to determine their attitudes toward training auxiliary dental personnel. No studies to decide the potential demand or use for auxiliaries had previously been undertaken. Respondents displayed a reluctance to admit others to their profession, referring to a trend toward illegal practice in dental care and expressing fear that dental auxiliaries might increase the trend. However, they agreed that auxiliaries could be usefully employed to teach oral hygiene and provide preventive care as long as they were university-trained, legally protected, and effectively discouraged from setting up independent practice. Some dentists recognized the potential for assistants to handle routine work and a few mentioned the need to restructure the entire health care framework to ensure accessible dental care for all. (HC)

2569 Pan American Gazette, Washington, D.C. *Teamwork for better dental care.* Pan American Gazette (Washington, D.C.), 5(2), Apr-Jun 1973, 2-4. Engl.

Recognizing that dental health problems in Latin America and the Caribbean cannot be solved by the professional dentist alone, the Ministry of Health of the Americas and the Pan American Health Organization (PAHO) have called for the addition of auxiliary personnel to the dental health team. At present in many Latin American and Caribbean countries, laboratory technicians and chair-side assistants already perform secondary tasks, such as designing dentures and prosthetic appliances, preparing patients, and performing

clerical tasks. With proper training, they could be performing additional functions and undertaking greater responsibilities. In fact, in Colombia, Paraguay, Cuba, and Jamaica, adequately trained auxiliaries may carry out primary dental care in schools, health centres, and other easily accessible settings. To help them and other dental personnel serving rural areas, there is a specially designed kit with inexpensive portable dental equipment available from PAHO – the Basic Dental Unit. (LB)

2570 **Pelton, A.J.** *Public health dental auxiliary training program at The Pas, Manitoba.* Journal of the Canadian Dental Association (Toronto), 41(6), Jun 1975, 347-348. Engl.

To compensate for the shortage of dental personnel in rural and northern Canada, a 5-year demonstration project to train local or native peoples as dental auxiliaries was begun in 1971 at Keewatin Community College, The Pas, Manitoba. The training programme is open to those with 10 years' education (or the equivalent in ability) and comprises five modules: preventive dentistry, including teaching dental health in the schools; oral prophylaxis and the complementary academic studies (dental anatomy, physiology, pathology, histology, terminology, materials, instruments, and equipment); chairside assisting and radiography; field experience in a remote community; and miscellaneous work that may include laboratory, clerical, supplementary clinical, and driving skills. Modules vary from 4-8 weeks in length. Upon graduation, the auxiliaries are employed by the Department of Health and Social Development to serve small communities. In future, if nationwide dental health insurance is introduced, an expanded role for dental auxiliaries is a distinct possibility. (HC)

2571 **Richardson, T.A.** *New Zealand school dental service: a report based on an observation tour of New Zealand: October 1970.* Ghana Medical Journal (Accra), 10(3), Jun 1971, 156-161. Engl.

The success of the New Zealand school dental service, in which vocationally trained school dental nurses care for the dental health of the students, is due to the organization and administration of the programme. The scheme is operated by an autonomous dental administration and is completely separated from the school medical services; it was established only after the deployment of dental nurses was legally limited to the public dental service and their training was standardized so they would be easily transferable within the school dental service. Inspections of clinic operations are conducted regularly by the principal dental officer and the dental nurse inspector and the clinics are located on the school premises, so that dental health is a part of everyday living. Some details regarding student selection, curriculum, working facilities, and working conditions are provided and the success of the scheme is attested to by the high dental awareness among the population of New Zealand. (HC)

2572 **Wuehrmann, A.H., Greer, D.F.** USA, Department of Health, Education, and Welfare. *Dental radiology teacher's manual.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(FDA) 74-8020, Feb 1974. 248p. Engl.

The immediate objective of this manual is to provide the educator with sufficient didactic and clinical material to allow her to present a course in dental radiology to potential dental assistants, dental hygienists, and/or dental auxiliaries; the ultimate objective is to upgrade the teaching of radiology so that unnecessary exposure to radiation in dentistry is avoided. The manual comprises eight sections, each of which is subdivided into a number of lesson plans. Topics covered in the sections include: physical principles of X-radiation used in dentistry, radiobiological concepts related to dentistry, radiographic technique (illustrated), principles of radiological health, X-ray films and intensifying screens, factors influencing radiographic film quality, darkroom technique, and film mounting, viewing, and interpretation. Laboratory exercises, a proposed course schedule, reference materials, teaching aids, etc., are appended. (HC)

IV.5 Primary Laboratory Care

See also: 2104, 2125, 2127, 2128, 2129, 2137, 2437, 2588, 2611, 2626, 2640, 2777

2573 **Kauffmann, M.** *Course on clinical laboratory technique.* Basle, Basle Foundation for Aid to Developing Countries, Mar 1962. 37p. Engl.

This textbook on clinical laboratory techniques was prepared for use in the Rural Aid Centre, Ifakara, Tanzania. It includes only methods that can be carried out in rural dispensaries and hospitals. Care of equipment, staining procedures, and examination of blood, cerebrospinal fluid, urine, and faeces are presented. Some useful information is also given on microscopic magnification, dilution of solutions, and conversion of temperatures, weights, and measures. The book is simply written and accompanied by clear, detailed illustrations. (HC)

2574 **Papua New Guinea, Department of Public Health.** ***Syllabus: dispenser training.*** **Port Moresby, Department of Public Health, n.d. 1v.(unpaged). Engl.**

Unpublished document.

A 3-year course has been designed for a new category of health worker in Papua New Guinea – the dispenser – whose function will be to administer a hospital pharmacy. Duties will include ordering and issuing drugs. The course is open to persons 16 years and older who have completed form III education with a good record in English, mathematics, and science. The course content includes English (mainly oral and written com-

prehension), mathematics, physics, chemistry, human biology, personal and community health, pharmaceutics, pharmacology, microbiology, and administration. The aims of the course and the different subjects within it are indicated throughout. (HC)

2575 **Taurama Hospital, Port Moresby.** *Training programme at Papuan Medical College for radiographers: detailed syllabus for training of candidates for the examination in radiology.* **Port Moresby, Taurama Hospital, n.d. 32p. Engl.**
Unpublished document.

The 3-year radiographer's course offered at Taurama Hospital, Papua New Guinea, aims at preparing students to conduct X-ray examinations and to organize and administer an X-ray department in a general hospital or health station. Applicants must have a minimum form IV education. Upon acceptance, students are employed full time as assistants in the hospital's X-ray department. Their curriculum consists of lectures, demonstration, and supervised practice. Subjects covered in the 1st year include radiography (an introduction), physics, anatomy, and physiology; in the 2nd and 3rd years, study is more specialized – radiographic equipment, radiographic photography, radiographic techniques, hospital practice, and introduction to pathology. Students must pass a final examination conducted by an external board of examiners appointed by the Papuan Medical College. A brief outline of the lectures and some additional information on salaries, conditions of training, etc., are given. (HC)

2576 **USA, Department of the Army.** *Handbook of procedures for the* **must** *laboratory.* Washington, D.C., U.S. Government Printing Office, Technical Manual No.8-228, Dec 1969. 1v.(various pagings). Engl. 20 refs.

Intended for use by U.S. military personnel in temporary laboratories, this handbook provides a step-by-step account of approximately 70 laboratory procedures. It includes a brief explanation of each procedure and its significance, the steps, and the interpretation of results. Pictures, line drawings, and slide reproductions are included to illustrate many of the procedures and tables of possible values are set forth. The handbook does not attempt to be a detailed laboratory manual and assumes knowledge of laboratory equipment, terms, etc. A subject index is included. (AC)

IV.6 Primary Environmental Health

See also: 2104, 2125, 2127, 2128, 2129, 2137, 2303, 2389, 2406, 2616, 2627, 2630, 2780

2577 **Nigeria, Ministry of Health.** *Address by the Honourable Commissioner for Health on the occasion of the formal opening of the Institute of Public Health, Calabar, on 11 Sep 1972.* Calabar, Nigeria, Ministry of Health, Institute of Public Health, 11 Sep 1972. 4p. Engl.
Unpublished document.

The purpose of the Institute of Public Health, Nigeria, is to train public health nurses, public health inspectors, community nurses, rural health inspectors, leprosy inspectors, dispensary overseers, and health overseers. At present, facilities include a lecture hall and administrative block, but the total complex will comprise a 2-storey block with an auditorium/assembly hall, two classrooms, laboratories, and staff rooms; a 2-storey block with four classrooms, a staff and a student library, laboratories, and a museum; a 2-storey hostel with dining and kitchen facilities and dormitories; and provision for playing fields and car parks. In addition to the traditional domain of public health (infectious disease control, environmental sanitation, etc.), the institute intends to concern itself with industrial health and plans to hire an industrial consultant. (HC)

2578 **WHO, Geneva.** *Sanitary staff and their training.* WHO Chronicle (Geneva), 15(9), Sep 1961, 329-337. Engl. 8 refs.
Also published in French, Russian, and Spanish.

Sanitary engineers and sanitary inspectors are the vital originators and caretakers of environmental safety and communicable disease control. As supervisors of public health, they are also an important part of the health service organization of every country. The sanitary engineer combines the functions of engineer, scientist, administrator, and medical worker in devising effective but inexpensive methods of water treatment and distribution, sewage disposal, disease vector eradication, food examinations, pollution control, and building inspection. His training involves at least 1 year of postgraduate study after a civil engineering degree. Many countries lack the educational facilities to produce such highly trained personnel, so the sanitary inspector adopts many of the local functions of the engineer. The normal duties of the sanitary inspector are to investigate the source of communicable diseases and bring them under control, to direct and motivate the construction of sanitary facilities and the practice of hygiene, and to become an available source for public information and education. Because these duties involve technical problems and difficult environments, the inspector's training should provide a basic theoretical as well as practical approach. A 6-month, post-primary school course should be sufficient if objectives and responsibilities of the inspector's task are clearly defined and identified. At present, WHO assists many third world countries with technical and financial aid. (ES)

IV.7 Teaching Aids

IV.7.1 Rural Health Care

See also: 2104, 2119, 2173, 2179, 2232, 2242, 2297, 2348, 2353, 2386, 2401, 2409, 2467, 2476, 2482, 2535, 2573, 2574, 2575,2649

2579 **Ahmad, R.** *Health of the nation and radio.* Hamdard (Karachi), 14(3-4), Jul-Sep 1971, 85-

86. Engl.
For complete proceedings see entry 2394.
Radio Pakistan, which is a government-supported broadcasting service, has played an important role in health education. It has kept in touch with national health policymakers and has emphasized messages of health priority. The subjects it has stressed have been preventive measures, maternal child care, occupational health dangers, and sanitation. It has also demonstrated its awareness of health conditions in rural and urban areas and has directed efforts toward remedying them. The author believes that this is the only role for radio and that the result of such efforts must be the eventual improvement of health in the entire population. (AC)

2580 All Saints' Hospital, Transkei, South Africa. *All Saints' Hospital district clinic course.* Transkei, South Africa, All Saints' Hospital, Dec 1972. 61p. Engl.
Unpublished document.
All Saints' Hospital, Transkei, South Africa, has designed a training course that prepares registered nurses to manage a district clinic and to be leaders, examples, and agents of change in the rural areas. The course's teaching methods aim at developing the skills and confidence of the nurse by means of supervised study and practical work supplemented by discussions. The training manual for the course deals with infant care, obstetrics, and health education, outlining principles and practice under these three headings and emphasizing prevention and education. In the section on health education topics, the experimental "Learning situation" for staff and pupils suggests ways of increasing mutual understanding between staff and local people who hold traditional ideas about health. (JT)

2581 Bailey, K.V. WHO, Brazzaville. *Manual on public health nutrition.* Brazzaville, WHO, 1975. 79p. Engl.
This detailed manual is intended to assist public health workers and health practitioners in Africa to diagnose nutritional disorders, undertake nutritional surveillance and simple nutritional surveys, organize nutritional rehabilitation services and supplementary feeding programmes, develop nutrition education programmes, and undertake nutrition training activities. Tables indicating the nutritional values of foods commonly used in Africa and the recommended intake of nutrients for children, women, and men are appended. (HC)

2582 Banks, E.R. *Community health: sanitation of homes in rural districts.* In Cruikshank, R., Standard, K.L., Goldthorpe, G., Cook, R., eds., Manual for Community Health Workers, Mona, Jamaica, University of West Indies, Department of Social and Preventive Medicine, 1968, 106-111. Engl.
See also entries 569 (volume 1), 2454, 2455, 2558, 2583, 2577, and 2634.
The construction of pit latrines for homes in rural areas would reduce the excreta-borne infectious diseases; therefore, simple instructions, such as the ones in this manual for community health workers, are basic elements of a community health project. They explain how to build and maintain a sanitary pit latrine. Suggestions for construction of public and school latrines are included and stress the need for constant inspection to enforce cleanliness. School latrines are urged because they serve as examples to rural children; when constructed they must be meticulously maintained. (ES)

2583 Banks, E.R. *Community health: insect vectors.* In Cruikshank, R., Standard, K.L., Goldthorpe, G., Cook, R., eds., Manual for Community Health Workers, Mona, Jamaica, University of West Indies, Department of Social and Preventive Medicine, 1968. 112-118. Engl.
See also entries 569 (volume 1), 2454, 2455, 2558, 2582, 2597, and 2634.
The control of insect vectors is an important lesson for health workers in developing countries and these lectures, prepared for the training of community health workers in Jamaica, offer vital information on the habits, life cycles, dangers, and control of fleas, lice, bed bugs, cockroaches, and houseflies. (ES)

2584 Bomgaars, M.R. Nepal, Family Planning and Maternal Child Health Project. *Working manual for clinical FP-MCH activities: for use by junior paramedical workers.* Kathmandu, Family Planning and Maternal Child Health Project, Feb 1976. 12p. Engl.
Unpublished document; see also entry 261 (volume 1).
This manual, written for paramedical workers involved in Nepal's Family Planning and Maternal Child Health Project, provides guidelines for running a rural clinic with very limited physical facilities. Clinic staff are advised to enjoy their work; be polite; accept help from local birth attendants, mothers, and other community members; and know when to refer patients to a hospital or health post. It recommends that staff should attend mothers and children together and should give each mother the opportunity to discuss her concerns and problems. Treatments that can be administered at home are explained clearly and a section about children under 5 years of age outlines some common health-related problems and lists questions to be asked of the mother, examinations to be carried out, and advice and treatment to be given by the worker. The manual suggests that a formal teaching session should be an integral part of the clinic's daily routine and proposes

topics and important ideas about health that should be taught. These include the importance of immunizations, good food, general cleanliness, and family planning. (JT)

2585 Boynton, W.H. Republic of Vietnam, Ministry of Health. *Manual for village health workers.* Saigon, Ministry of Health, n.d. 75p. Engl.

This simple manual was prepared for use by village health workers in the former Republic of Vietnam. It covers the duties of a village health worker, location and maintenance of the health station and the medical kit, personal and sickness hygiene, food hygiene, sanitation, dosages of medicines contained in the village medical kit, disease transmission, injuries and first aid, and the symptoms, causes, treatment, and prevention of common diseases and disorders. Procedures are outlined in step-by-step fashion and some are accompanied by illustrations. (HC)

2586 British Red Cross Society, London. *Manual for instructors. 2 edition.* London, British Red Cross Society, 1975. 51p. Engl.

Intended for use by British Red Cross instructors, this manual presents principles of teaching and learning, guidelines for speaking, ideas for making and using audiovisual aids, steps for planning lessons, and teaching methods. Also included are chapters on simulating a casualty and organizing field exercises. The information is practical and general enough to be applied to any training course, although examples of specific applications have been chosen from nursing and first-aid coursework. (AC)

2587 Bryceson, A., Pfaltzgraff, R.E. *Leprosy for students of medicine.* Edinburgh, Churchill Livingstone, 1973. 152p. Engl. 82 refs.

Though this book was written for medical students in Nigeria, its concrete practical information on all aspects of leprosy makes it a useful manual and handbook for other well-educated students and workers. The aetiology of leprosy is covered as well as clinical and social aspects of the care of patients. Throughout, the book promotes enlightened, integrated care and calls for fundamental research into ways of detecting and protecting individuals at risk. It notes that early detection, treatment, and energetic management can keep the patient free of disabilities but that the stigma and fear associated with the disease can be difficult to dispel. The value of accurate classification of the disease as it occurs in each patient is stressed and principles of rehabilitation are spelled out. The principles of physical rehabilitation include prevention of disability and conservatism in surgical treatment. Principles of social, psychological, and vocational rehabilitation are based on educating the patient, his family, and the community. The text is illustrated, using diagrams and 43 excellent plates, and a list of recommended readings follows every chapter. (JT)

2588 Cheesbrough, M., McArthur, J. *Laboratory manual for rural tropical hospitals; a basis for training courses.* Singapore, Boon Hua Printing Company, 1976. 209p. Engl.

Recognition of the importance of laboratory investigation in tropical rural hospitals prompted the authors to prepare this manual for setting up and operating a rudimentary laboratory. It comprises sections on equipment; microscopy; haematology; blood transfusion; bacteriology; examination of stools, urine, and other fluids; and parasitology. It does not assume medical or laboratory knowledge and contains illustrations and photographs to explain phenomena that are difficult to describe, such as beakers and apparatus, cells and parasites, etc. Included are transparencies of some cells, bacteria, and parasites, with a collapsible viewer for the reader's convenience. The manual details methods concisely and discusses the objectives of the procedures and the reasons for them. There is a list of definitions at the front and an index in the back of the book. An appendix is also provided, relating the steps for preparing laboratory solutions. (AC)

2589 Clarke, D.J. Papua New Guinea, Department of Public Health. *Child health: nutrition and growth: enrolled nurse course of study. Unit I: student workbook and teacher's guide.* Port Moresby, Department of Public Health, Oct 1973. 2v.(various pagings). Engl.

Unpublished document; see also entries 2270, 2500, 2508, 2519, 2596, and 2618.

The nutrition portion of the child health course for enrolled nurses in Papua New Guinea is based on two resource books – a student workbook and a compilation of lesson plans for the teacher. The two are parallel, providing the teacher with ideas for activities and the student with background information for classroom study. Topics of study include steps in weighing children and graphing their progress, basic nutrition and food preparation, and food for babies and children. The nutrition component of the course is designed to cover approximately 35 hours. (AC)

2590 Courtejoie, J., Rotsart de Hertaing, I. Bureau d'Etudes et de Recherches pour la Promotion de la Sante, Kangu-Mayumbe, Zaire. *Notions de pharmacologie pour les regions tropicales. (Tropical pharmacology).* Kangu-Mayumbe, Zaire, Bureau d'Etudes et de Recherches pour la Promotion de la Sante, 1974. 204p. Fren.

See also entries 2326, 2386, and 2591.

This training manual-cum-handbook is designed to equip nurses with the pharmaceutical knowledge necessary to treat diseases and conditions prevalent in Zaire. The first part covers some general information concerning the names, dosages, side effects, toxicity, and methods of administering drugs; the second discusses the indications, properties, and dosages of specific drugs. These are categorized as: vaccines, serums, and antibiotics; anthelminthics and other antiparasitics; medicines that act on the central nervous system; medicines

that act on the circulatory system; antihistamines; medicines that act on the respiratory system; medicines that act on the digestive system; medicines that act on the genitourinary tract; vitamins, minerals, and hormones; externally applied antiseptics; and topical applications. A third part consists of an index of all medicaments described in the text. (HC)

2591 **Courtejoie, J., Rotsart de Hertaing, I.** Centre d'Etudes et de Recherches pour la Promotion de la Sante, Kangu-Mayumbe, Zaire. *Educateur nutritionnel: comment ameliorer l'alimentation des enfants par l'education. (Nutrition educator: how to improve child feeding through education).* Kangu-Mayumbe, Zaire, Centre d'Etudes et de Recherches pour la Promotion de la Sante, Brochure Illustre No.32, n.d. 45p. Fren. 20 refs.
See also entries 2326, 2386, and 2590.

Instructions for planning and implementing a nutrition education programme are set forward for the benefit of nurses, teachers, and auxiliary health workers in Zaire. The programme includes a nutrition component based on the rational utilization of available foodstuffs, an agricultural component aimed at increased production and better conservation of produce, and a sanitation component aimed at the control of infectious and parasitic diseases. The education of mothers, who, along with young children, form the main target in the fight against malnutrition, is to be confined to appropriately-trained young village women. The training and functions of these auxiliaries are outlined in the appendices, along with some suggestions regarding teaching materials and techniques. (HC)

2592 **Daniel, F.** *Health science and physiology for tropical schools. 8 edition.* London, Oxford University Press, 1974. 307p. Engl.

This textbook is intended for use in secondary schools in tropical and subtropical countries to provide students with a foundation of accurate knowledge about healthy living in the tropics. To this end, the basic anatomy, physiology, and hygiene of the various parts and processes of the human body are described. There are also separate chapters on food and nutrition, conquest of disease, and public health services. The appendices contain tables of daily nutritional requirements and the composition of milk of various mammals; a calorie chart and lists of food rich in iron, calcium, protein, and vitamins A, B, and C; instructions for dissecting a small mammal; a summary of the effects of alcohol upon the human body; a glossary of scientific words; etc. A chart with simple pictures illustrates disease vectors, reservoirs, and infective agents. (JT)

2593 **Dean, P.** *Paediatric out-patients' manual: Africa.* Anua-Uyo, Nigeria, St. Luke's Hospital, 1973. 50p. Engl.

This manual for nurses who work in a children's outpatient ward in a Nigerian hospital emphasizes "clinical sense" in diagnosis, standard treatment regimens, and the promotion of health and preventive medicine. The symptoms and treatment of the most common diseases are described and procedures such as history taking, recording weights, etc., are detailed. Charts illustrating the proper dosages of vitamins, antibiotics, chemotherapeutic agents, and other commonly used drugs are included. (HC)

2594 **Dowling, M.A.** *Needs of developing countries: a challenge to the illustration services.* Medical and Biological Illustration (London), 26(3), Aug 1976, 135-137. Engl.

The production of suitable teaching aids in developing countries poses an immense challenge to departments of medical illustration; the diversity of the audience (from medical students to illiterate village workers) and the lack of viewing equipment (projectors) present unique problems. At present, medical illustrators in developing countries are few and generally they have not formed organizations or associations to coordinate their efforts. In future, they must join together and share experimental techniques in developing usable materials and equipment. The World Health Organization has recently extended its research expertise into this field and is designing nonverbal teaching materials. Research into inexpensive equipment is also under way, but opportunities for ingenuity and cooperation outside the institutional setting are still unlimited. (AC)

2595 **Ebrahim, G.J.** East African Literature Bureau, Nairobi. *Practical mother and child health in developing countries. 2 edition.* Nairobi, East African Literature Bureau, 1974. 109p. Engl.

This training manual for well-educated assistants, nurses, and midwives discusses maternal child health services appropriate for developing countries. The information that is included supports MCH aims of health maintenance, control of communicable diseases, early detection of sickness, and collection of simple statistical data for regional and national levels, and complements services found in a hospital ward or clinic where adequate attention to the sick child can be promptly given. Therefore, it does not include procedures for expanding care of sick or handicapped children, although there are useful recommendations for "at-risk clinics" and nutrition rehabilitation centres. Throughout the manual, breast-feeding is urged and the important functions of day care centres, school health services, home visitors, and community development workers are also considered. In all, 24 chapters, illustrated by 15 drawings and charts, contain many practical hints for students trained in MCH techniques and procedures. (AB)

2596 **Ellison, A., Eassie, A.** *Lessons in psychiatric nursing.* Port Moresby, Papua New Guinea School of Nursing, n.d. 33p. Engl.
Unpublished document; see also entries 2270, 2500, 2508, 2519, 2589, and 2618.

Psychiatric nursing in Papua New Guinea is the subject of this composite, which has been devised for use by teachers of enrolled nurses in their 2nd year of study. Containing seven lectures, it sketches a brief history of mental illness and provides information on normal

development, stress, psychosomatic illness, neuroses, psychoses, etc. The final lecture covers techniques of observing and recording behaviour and is accompanied by a checklist for use by students. The total comprises 8 days study. Sample examinations and answers are included, but no information is provided on how to evaluate answers. (AC)

2597 **Ennever, O.** *Personal and community health: part I.* **In Cruikshank, R., Standard, K.L., Goldthorpe, G., Cook, R., eds., Manual for Community** Health Workers, Mona, Jamaica, University of West Indies, Department of Social and Preventive Medicine, 1968, 87-97. Engl.
See also entries 569 (volume 1), 2455, 2558, 2582, 2583, 2634, and 2686.

Personal and community health is a core subject in the curriculum of community health workers in Jamaica. **The first section of the course deals with personal hygiene, including the general care and cleanliness of the** body and the importance of physical and mental fitness. Attention to one's body through regular washing, exercise, posture, fresh air, rest, and good habits is emphasized and the community health worker's importance as an example of positive health is noted. (ES)

2598 **Ethiopia, Ministry of Public Health.** *Syllabus: bacteriology for elementary dressers in Ethiopia.* Addis Ababa, Ministry of Public Health, n.d. 16p. Engl.
Unpublished document; see also entries 2461, 2462, 2515, 2516, 2517, 2599, and 2600.

This textbook for the elementary dresser's bacteriology course in Ethiopia is divided into three units that cover the nature and characteristics of bacteria, other disease-causing one-celled and multi-celled organisms, and the natural and artificial defenses of man against disease. Each unit includes a number of simple experiments that may be conducted by the student and a number of statements to be completed by the student (missing words are supplied in the margin for verification). The practical nature of the experiments is evident in their titles: growing bacteria from hands; looking at bacteria under a microscope; growing bacteria from a cough, a dirty needle, and a baby bottle; the effects of sunlight and cold on bacterial growth; infecting an animal with bacteria; sterilizing a needle by boiling; and seeing how penicillin kills bacteria. Instructions are simple. (HC)

2599 **Ethiopia, Ministry of Public Health.** *Syllabus for pharmacology for advanced dressers in Ethiopia.* Addis Ababa, Ministry of Public Health, n.d. 32p. Engl.
Unpublished document; see also entries 2461, 2462, 2515, 2516, 2517, 2598, and 2600.

The purpose of the pharmacology course for advanced dressers (auxiliary health workers) in Ethiopia is to review what they learned in earlier training and on the job; to expand their knowledge regarding the indications for, dosages of, and side-effects of the various drugs; and to prepare them for prescribing drugs. The course comprises 21 units: properties and administration of drugs; local anti-infectives; antibiotics; sulfonamides; anti-tuberculosis drugs; anti-malaria drugs; anti-leprosy drugs; drugs that act on the skin and mucous membranes; the circulatory, respiratory, digestive, nervous, urinary, and endocrine systems; drugs used in obstetrics; ophthalmic preparations; drugs that act on the ear; antihistamines; vitamins and minerals; and poisons. Details about each unit are set forth. (HC)

2600 **Ethiopia, Ministry of Public Health.** *Obstetrics for advanced dressers.* Addis Ababa, Ministry of Public Health, n.d. 19p. Engl.
Unpublished document; see also entries 2461, 2462, 2515, 2516, 2517, 2598, and 2599.

The purpose of this course is to instruct the Ethiopian advanced dresser (auxiliary health worker) in the management of normal and abnormal pregnancies and deliveries and care of the newborn. The major and minor disorders of pregnancy, their causes, treatment, and prevention; the signs, length, and management of normal labour and parturition; the management of complications during childbirth; postpartum care; and care of the normal and premature newborn are described step-by-step. Course theory is complemented by practice in the antenatal clinic and maternity wards. (HC)

2601 **Fazli, F.A.** *Health of the nation and films.* Hamdard (Karachi), 14(3-4), Jul-Sep 1971, 83-84. Engl.
For complete proceedings see entry 2394.

Good films are a palatable and effective form for health education in Pakistan – the better their quality in story and technique, the more acceptable their message. Suitable sujects for films include sanitation and disease control, but the health message should be enmeshed in an interesting story to enhance its impact. Such a presentation would serve a double purpose – it would relax the viewer's mind and at the same time make him see healthy living as desirable. In the past, the Pakistani government and health organizations have not effectively utilized this media of education and films either have not been devoted to improving health standards or have been too didactic to be productive. (AC)

2602 **Gadagbe, E.Z.** Togo, Ministere de la Sante Publique et des Affaires Sociales. *Conseils de sante a la famille africaine. (Health advice for the African family).* Lome, Togo, Ministere de la Sante Publique et des Affaires Sociales, Aug 1973. 126p. Fren.

This teaching manual was prepared by the Togo Ministry of Public Health and Social Affairs and the U.S. Peace Corps for use by health educators, particularly in the field of maternal child health. It includes sections on pregnancy and child health – infant nutrition and disease – with an appendix containing rules of applied nutrition and recipes suitable for children. Each section consists of a series of question-and-answer lessons concerning problems of pregnancy or child health, with suggested audiovisual aids and demonstrations and a

list of essential ideas accompanying each lesson. There are many illustrations and several characters, with whom the students can identify, reappear from lesson to lesson to exemplify consistently the right or wrong way to do things. The vocabulary is simple and the limited focus of each lesson simplifies and reenforces basic precepts of maternal child health. The section on pregnancy covers such topics as prenatal consultations, constipation, hygiene, unusual symptoms and complications, parasitic and venereal diseases, neonatal tetanus, and the stages of labour. Included in the second section are lessons on breast-feeding, other infant foods, kwashiorkor, teething, dehydration, diarrhea, immunization, measles, intestinal parasites, and birth control. (RMB)

2603 Ganicky, B., Mensah-Steel, A.O., Osei-Boadu, E. WHO, Brazzaville. *Health education in Ghana.* Brazzaville, WHO, 19 Mar 1974. 53p. Engl.

This report describes the progress in health education in Ghana during 1967-1973 and recommends future aims and activities. Examples of the accomplishments include preparation of syllabi for basic and postbasic programmes for community health nurses, midwives, and ward sisters; the initiation of annual health education seminars that run 8 weeks and average 40 participants; and the formation of a school health education unit. Recommendations for future aims are to develop surveys on the needs and resources of public health education programmes, to draw up teaching aids, to utilize communications media for health education activities, and to provide more guidance and technical supervision for health education workers in the field. The structure of the Health Education Division of the Ministry of Health, Ghana, is illustrated and annexes outline the scope of work of its various units such as the maternal and child health unit, communicable disease control and environment sanitation, field operations and training, school health education, etc. Other annexes deal with the duties of a regional health educator, the training and functions of public health nursing staff, and the steps in data collection on health facilities, water supply, and waste disposal. The health education programme benefited from UNDP and UNICEF financial support. (EE)

2604 Goodwin, L.G., Duggan, A.J. *New tropical hygiene and human biology.* London, George Allen and Unwin, 1972. 194p. Engl.

Based on modern hygiene theory and recent research into the causes, prevention, and cure of tropical diseases, this textbook is intended for use in elementary teacher training colleges and upper primary, middle, and secondary schools in Africa, Asia, and South America. It integrates theoretical and practical knowledge and treats the subjects thoroughly enough to prepare students for school certificate and general certificate of education examinations in health science. Thirty-one chapters are presented in four sections that deal with the structure and functioning of the human body; animals of medical importance; the causes, effects, and control of common tropical diseases; and the conditions of life on earth and the principles for healthy living in communities. Within the third section, chapters on diseases clearly explain the reasons for particular preventive measures and describe practical low-cost methods in environmental hygiene. In the final section, two chapters examine ecology, pollution, overpopulation and briefly cover personal health, social customs, old age, and cancer. Seventy diagrams and drawings enhance the simple but carefully conceived text. (JT)

2605 Guatemala, Ministerio de Salud Publica y Bienestar Social. *Manual de educacion sexual. (Sex education manual).* Guatemala City, Ministerio de Salud Publica y Bienestar Social, n.d. 105p. Span.

This manual is intended as a guide for the rural health technician and other paramedical workers in Guatemala. It is the basis for courses on family life and sex education, which aim to overcome the misconceptions surrounding human sexuality and promote responsible procreation and conscientious parenthood. The manual is divided into four units: the first discusses the importance of sex education; the second, which is entitled "Preparation for family life," treats engagement, the teacher and the pupil, considerations before marriage, preparation for sexual relations, sex in marriage, and responsible parenthood; the third illustrates male and female reproductive anatomy; and the fourth explains how to plan, present, and evaluate a sex education course. (HC)

2606 Hamza, M.H., Segall, M.M. *Care of the newborn baby in Tanzania.* Dar es Salaam, Tanzania Publishing House, 1973. 43p. Engl.

This manual, which was intended for use by Tanzanian medical assistants, describes the characteristics of the healthy newborn and explains routine procedures during childbirth and postpartum. It also discusses abnormalities that might occur in the neonatal period and details their treatment. Special instructions are given on neonatal care of infants weighing less than 2 kg – a syndrome that is mainly due to maternal malnutrition and infection during pregnancy. (AC)

2607 Horne, D., Williams, V. South Pacific Commission, Noumea. *Handbook of hospital and health service administration.* Noumea, New Caledonia, South Pacific Commission, Handbook No.12, 1975. 69p. Engl.

The principles of administration and management as they relate to health and hospital conditions in the South Pacific are set forth in this handbook for medical, nursing, administrative, and clerical staff in that region. Topics covered include the determination and rationale of objectives; long- and short-term planning; organization and the allocation of work; supervision, control, and discipline; communications; decision-making and problem-solving; the work team; training in management; and the recognition of characteristics

of a good (and bad) administrator. All concepts are expressed in simple language. Sample organization charts for a general hospital, a district hospital, and a district health service department; training and job instruction timetables; and a job breakdown sheet are included. (HC)

2608 **Horsfield, G.** *Starting public health safaris in an area.* Nairobi, Kenya Catholic Secretariat, 1972. 108p. Engl.
Unpublished document.
This training manual for community health aides has been used at Nangina Hospital, Kenya, since 1972. The manual contains practical advice on public relations and the psychology of potential patients, methods for organizing a safari clinic (mobile health unit) depending on its location and/or purpose, necessary equipment, and teaching methods and topics for maternal classes in child health. The introduction to public health teaching in the second section includes the job description for a public health aide at Nangina Hospital; a review of basic anatomy, such as the skeletal, circulatory, respiratory, etc. systems; and a detailed public health aide syllabus covering child health and common diseases, maternal health and childbirth, public health, environmental sanitation, nutrition, traditional medicine, and family planning. (RMB)

2609 **Jancloes, M., ed(s).** *Manuel pratique pour infirmiers de dispensaires ruraux. (Manual of nursing practice in the rural dispensary).* Inkisi, Zaire, Hopital de Kisantu, 1974. 68p. Fren.
This manual comprises condensations of lectures presented at Kisantu Hospital, Zaire, during refresher courses for nurses. It provides dispensary nurses with the means to improve their diagnostic and organizational skills. Topics treated include: the role of the rural dispensary; injection techniques and hygiene; diagnosis and treatment of malaria, parasitic diseases, respiratory tract diseases, anaemia, etc.; diagnosis and treatment of the common diseases of childhood; procedures for gynaecological examination (with emphasis on proper history-taking); management of obstetric emergencies; minor surgical procedures that may be conducted in the dispensary; laboratory technique in the dispensary; laboratory supplies and their maintenance; prenatal care; preschool consultation; vaccination schedule and programme organization; and health and nutrition education (including teaching methods). A timetable of dispensary activities and checklist of supplies and drug dosages are also included. (HC)

2610 **Kimhi, A., Oleinik, A.** Hebrew University, Jerusalem. Kupat Holim, Tel Aviv. *Program of a course in health education.* Tel Aviv, General Federation of Labour, Kupat Holim, May 1973. 9p. Engl.
The curriculum of a two-part course for health educators is presented. Held in Beilinson Hospital (Petah Tikwah, Israel) in 1973, the 11-day course concentrated mainly on health education techniques and problems. Special stress was laid on the understanding and handling of different ethnic groups and their beliefs and customs relating to health matters. Lectures and demonstrations were given. Topics included the nature and scope of health education and its implementation; modern approaches to preventive medicine; health education in hospitals, clinics, and schools; the medical team as viewed by the patient; and various community service subjects. (EE)

2611 **King, M.** *Medical laboratory for developing countries.* London, Oxford University Press, 1973. 1v.(various pagings). Engl., Span. 14 refs.
Along with U.S. $500 of basic equipment and associated teaching aids, this manual forms part of a health care package that aims to bring medical laboratory examinations to rural peoples throughout the world. It presents methods for preparing a laboratory; measuring ingredients;, using a microscope; examining blood, urine, cerebrospinal fluid, stools, etc.; and transfusing blood. The text is simple – using approximately 1 500 words of vocabulary – and difficult words have been printed in bold type and included in a vocabulary index at the back of the book. Important concepts and methods are also set off in thick, black print and complete lists of equipment are included. The value of UNICEF's providing the entire health care package is acknowledged. (AC)

2612 **Leedam, E.J.** *Community nursing manual: a guide for auxiliary public health nurses.* Singapore, McGraw-Hill International Health Services Series, 1972. 224p. Engl.
This manual is intended for use by auxiliary public health nurses in developing countries. The first four chapters are devoted to defining the community as an environment including the factors influencing health, local customs, housing, and sanitation; chapters 5-9 cover health education, nutrition, and family planning; chapter 10 discusses the administrative and legal aspects of public health practice; chapters 11-15 describe nursing roles in maternity units, health centres, clinics, and homes; chapter 16 discusses diseases that can be tackled by mass campaigns; and chapter 17 suggests allies, such as local leaders, teachers, agricultural extension workers, etc., approach for help. Sections on nutrition, diagnosis and treatment of children, and immunization are annexed. (HC)

2613 **Lembaga Kesehatan Nasional, Surabaya, Indonesia.** *Child in the health centre. Book 1: manual for health workers.* Jakarta, Government Printer, 1974. 1v.(various pagings). Engl.
Intended for use by child health workers in Indonesia, this manual comprises three main parts. The first, "How to begin," contains chapters on using the manual, diagnosing and preventing diseases in the community, ordering and administering drugs, caring for healthy and sick children, and working in a clinic or practicing privately. The second part, which constitutes 19 chapters and the bulk of the manual, explores health

problems in children. Each chapter in this part concludes with a section on caring for the health problems discussed within it. The manual's third part is a chapter devoted to the newborn baby. Throughout the manual, graphics illustrate complex concepts, important notes are set apart from the main text between double rules, and the steps for carrying out procedures are italicized for easy recognition. The index at the back of the book includes definitions of the terms it contains. (AC)

2614 **Mathur, G.M., Chaturvedi, R.P.** *Teaching of community health through mobile training-cum-service hospitals.* Indian Journal of Preventive and Social Medicine (Varanasi, India), 3, Mar 1972, 54-56. Engl.

The government of India has devised a scheme through which all interns may fulfill their requirement for 3-months rural practice; the medical colleges lacking access to a field practice area will receive mobile health units. Units will contain facilities for outpatient clinic, inpatient care (50 beds), laboratory examination, X-ray, dispensary, emergency medical care, health education, etc., and will be staffed by teachers from the departments of preventive and social medicine, medicine, surgery, and obstetrics/gynaecology as well as interns, final year students, and student nurses. They will camp near a primary health centre for 1-3 months, provide preventive and curative services, conduct morbidity surveys, collect vital statistics, participate in disease-eradication programmes, and assist in the national family planning programme. The activities of an existing unit, attached to the J.L.N. Medical College, Ajmer, are described. Although the scheme's value as a teaching tool is unquestioned, the author cautions that the contrast between the mobile unit's excellent equipment and that of the primary health centres may discourage doctors from rural practice and cause the population to lose faith in the permanent services. (HC)

2615 **Mousseau-Gershman, Y.** *Manuel de travaux pratiques en sante communautaire: perspective internationale. (Community health practice manual: an international perspective).* Montreal, Editions HRW, 1975. 155p. Fren.

This teaching aid-cum-handbook contains a series of practical exercises that have been designed to show community health workers how to translate theories of public health into effective action. It can be used as a basis for research assignments during training and it provides a checklist for use in conducting various community health activities on the job. Procedures include diagnosing community needs, assessing community resources, conducting epidemiological surveys, providing follow-up care, visiting patients at home, caring for prenatal and postnatal patients, examining healthy children, etc. Formulae for conducting these activities are in point form and are followed by recommended exercises. Space is provided for the student to record her experience in the field. (HC)

2616 **Narain, B.** India, Ministry of Community Development. *Manual of health.* Delhi, Albion Press, C.P.A. Series No.32, n.d. 67p. Engl.

Intended as a guide for village level workers, community development workers, and health staff, this manual describes the most common and urgent health problems found in rural India, their management, and prevention. Topics include the importance of a pure water supply and methods of water purification, air and ventilation requirements and systems, housing (including a plan for housing animals away from the family living space), personal hygiene, maternal and child health and family planning, nutritional requirements and their sources, sanitation, communicable diseases, and health resources available to the community. Detailed plans for the construction of a primary health centre, various types of latrines, and a "smokeless" stove are appended along with an explanation of the functions of health personnel. (HC)

2617 **Nepal, Ministry of Health.** *Health post technical staff operations manual.* Kathmandu, Ministry of Health, Department of Health Services, Community Health and Integration of Health Services Division, Training Cell, Jan 1975. 200p. Engl.

The government of Nepal has initiated a programme that integrates family planning, maternal child health, infectious disease control (malaria, smallpox, tuberculosis, Hansen's disease), health education, and promotive health projects. Workers involved in the integrated programme use this book as a training manual and reference text. Comprising 13 chapters, it covers basic concepts of health and disease and discusses preventive, promotive, and curative tasks. Other topics include nutrition, rehydration for diarrhea, health post administration and maintenance, and the concepts of supervision for team leaders and field staff. At the beginning of each chapter, a syllabus and a list of what readers will be able to do after following the training programme are presented. The final chapter entitled "The ANM" (auxiliary nurse-midwife) deals with home visiting, domiciliary delivery, midwifery emergencies, and the relationship to be established with local birth attendants. Typical of the rest of the manual, this chapter advises the ANM to make herself acceptable to traditional midwives as a teacher, guide, and support, aiming toward improved and safer delivery practices. (JT)

2618 **Nursing Council for Papua New Guinea, Port Moresby.** *Guide to the teacher of anatomy and physiology: enrolled nurse level.* Port Moresby, Nursing Council for Papua New Guinea, Sep 1973. 100p. Engl.

Unpublished document; see also entries 2270, 2500, 2508, 2519, 2589, and 2596.

This guide, which has been compiled for use by teachers of enrolled nurses in Papua New Guinea, provides topics, teaching methods, and learning goals for the course in anatomy and physiology. The course is aimed at giving students an elementary knowledge of the gross structures and normal functions of the body and

enabling them to apply this knowledge to the practice of nursing and the maintenance of their own health. Basic information has been adapted from *Anatomy and Physiology* by K.F. Armstrong (London), but the order in which it is presented has been changed. A total 90 hours have been allocated to the course, which has been divided into 11 study units. They comprise a general introduction and more detailed study of the nervous system, musculoskeletal system, circulatory system, the skin, and special senses. (AC)

2619 Obura, C.W. *Up country dentistry.* AFYA (Nairobi), 7, Jan 1973, 8-11; Mar 1973, 42-45; May 1973, 74-75. Engl.

Three short articles, "Basic anatomy of the teeth," "Disease of the teeth (Dental caries) and treatment," and "Diseases of the gums," discuss the nature and treatment of dental problems likely to occur in Africa. The first article illustrates the tooth's component parts and its placement in the jaw and discusses possible complications arising from the early eruption of milk teeth or from impacted wisdom teeth. The second, a description of dental caries and their causes, suggests the common preventive measures of brushing, fluoridation of drinking water, and regular checkups. Following an explanation of the symptoms and signs of tooth decay, treatment by filling or extraction is recommended. The subject of the third article is gingivitis, its causes, recognition, prevention, and treatment. Gingivitis in Africa often results from vitamin deficiencies, diabetes, malnutrition, and certain blood diseases that must be recognized and treated before the gum disease can be cured. Illustrations complement each article. (ES)

2620 Pan American Health Organization, Washington, D.C. *Guidelines to young child feeding in the contemporary Caribbean.* Washington, D.C., Pan American Health Organization, Scientific Publication No.217, 1970. 16p. Engl.
Meeting of the Caribbean Food and Nutrition Institute, Mona, Jamaica, 15-19 Jun 1970.

At a 1970 meeting sponsored by the Caribbean Food and Nutrition Institute, local pediatricians, obstetricians, nutritionists, and educators drew up these guidelines on the feeding of infants and young children. They stress the importance of maternal nutrition and strongly recommend breast-feeding because of its nutritional advantages, low cost, convenience, relative sterility and anti-infective properties, and emotional benefits. The guidelines urge health care personnel to promote breast-feeding among all women of childbearing age and to oppose advertising of commercial milk products on government premises. Guidelines for artificial feeding, when necessary, and weaning are also given. Appendices include charts of recommended maternal daily dietary allowances, economical and locally available Caribbean foods, and protein and calorie requirements in early childhood. (RMB)

2621 Papua New Guinea, Department of Public Health. *Look after your hands and feet.* Port Moresby, Department of Public Health, Information and Extension Services, Jul 1973. 28p. Engl.

This simply written, illustrated handbook describes precautions that leprosy patients can take to avoid damaging anaesthetized feet or hands. They include avoiding heavy work; wearing gloves or using tongs when handling hot food; wearing shoes; caring meticulously for sores, ulcers, cuts, or burns even though they are not painful, etc. A number of exercises to keep the patients' hands from stiffening are recommended and illustrated. (HC)

2622 Papua New Guinea, Department of Public Health. *Drug reference for nurses.* Port Moresby, Department of Public Health, n.d. 268p. Engl.
See also entry 2623.

This drug reference handbook, prepared in Papua New Guinea as part of a curriculum guide project for nursing education, is intended for use by nurses working within a health team but may be useful for staff working independently. Systematically presented, the information is enhanced by pertinent instructions for patient care. Included are nearly 300 commonly used drugs, which have been grouped according to route of administration. Some drugs, which are to be administered orally, have been categorized by tablet size, but all other entries within sections are in alphabetical order under the generic names. Reported for most items are indications and contraindications, special precautions, dosage, expected side effects, details of packaging, and storage advice. Where relevant, antidotes, instructions for making up specified strengths, and suggested levels of expertise required of persons administering the drug are set forth. Additional reference materials include explanations of the metric system, drawings and instructions for correct use of equipment, and a check list to follow when giving dangerous drugs. (JT)

2623 Para-Medical Training College, Madang, Papua New Guinea. *Pocket book of drug dosages and procedures for health extension officers.* Madang, Papua New Guinea, Para-Medical Training College, Nov 1974. 194p. Engl.
See also entry 2622.

This pocket handbook is designed as a ready reference for health extension officers in Papua New Guinea who have both medical and administrative responsibility for rural health centres. In simple English, the booklet brings together information on management and maintenance procedures in handling drugs, equipment, and some emergencies. The entries under anaesthetics, fluid therapy, contraception, and snakebite are especially detailed. (JT)

2624 Pasnik, J.L., Hasselblad, O.W. American Leprosy Missions, Bloomfield, N.J.. *Reference and training manual for physical therapy technicians in leprosy.* Bloomfield, N.J., American Leprosy Missions, n.d. 134p. Engl. 23 refs.

This book has been prepared for use in training well-educated technicians either to assist professional physical therapists or to provide physical therapy for patients in a physician-supervised leprosy rehabilitation programme. It may also prove useful as a reference in teaching patients to prevent secondary deformities connected with leprosy. The detailed text and diagrams concentrate on the evaluation and treatment of common problems, but they also explain the rationale behind various treatments and indicate the areas of the human body that leprosy is likely to affect. The authors stress the importance of patient cooperation, which can only be solicited by efficient, understanding personnel. (JT)

2625 **Peace Corps, Washington, D.C.** *Action Peace Corps: health training resource material for Peace Corps volunteers.* Washington, D.C., Information Collection and Exchange Office of Multilateral and Special Programs, Program and Training Journal Reprint Series No.3, n.d. 313p. Engl.

Introducing American Peace Corps volunteers to work in developing countries is the aim of this manual. It contains information on the volunteer's cultural biases and the importance of beliefs and cultural patterns in health programmes. Two sections are devoted to methods for health education in the school and community and almost half the manual is sanitation resource material, including such titles as "Drink safe water," "How to wash your clothes," and "Get rid of household pests." Appendices are an article on Baganda women's expressed needs in infant nutrition, a description of the Save the Children Fund home feeding kit, and nutritious recipes using local African foods. (AC)

2626 **Peru, Ministerio de Salud. Escuela de Salud Publica del Peru.** *Curso para tecnicos de laboratorio. (Course for laboratory technicians).* Lima, Ministerio de Salud, Serie Informativos de Cursos, Ano 12, No.10, 1973. 48p. Span.

The Peruvian School of Public Health offers a 6-month course of advanced training in public health, basic sciences, and laboratory procedures and teamwork to a maximum of 20 already-practicing laboratory technicians. This student handbook contains information on admissions requirements, the organization of the course into classroom and laboratory periods, and the rules, regulations, and restrictions placed upon students. The curriculum and course schedule are outlined in great detail. (RMB)

2627 **Peru, Ministerio de Salud. Escuela de Salud Publica del Peru.** *Organizacion de los cursos para tecnicos en saneamiento. (Organization of courses for environmental sanitation technicians).* Lima, Ministerio de Salud, Serie Informativos de Cursos, Ano 11, No.7, 1972. 1v.(unpaged). Span.

The Peruvian School of Public Health trains a yearly maximum of 20 students to work as sanitation technicians under the direction of a sanitary engineer. The 6-month course provides classroom and field experience in public health, epidemiology, and methods of improving the environment, such as garbage control, construction techniques, etc. This document contains information on admission requirements, the organization and administration of the course, and student rules and regulations. The material included in the curriculum is outlined in great detail. (RMB)

2628 **Rothwell, J.** *Ayuda docente para enfermeras auxiliares. (Teaching aids for auxiliary nurses).* Chimaltenango, Guatemala, Behrhorst Clinic, 1972. 1v.(various pagings). Span.
Unpublished document.

This collection was compiled for use in training indigenous auxiliary nurses in Guatemala. The illustrated sheets are geared to the education level of the trainees (2-6 years formal education) and the facilities and medicines available in a rural clinic. They cover ethics for auxiliary nurses; the parts of the body and their functions; the cause and transmission of disease; the cause, symptoms, and treatment of various diseases and disorders; first aid; nutrition; family planning; and maternal and child health. In the Behrhorst hospital, each formal classroom session is followed by a demonstration and an informal lecture during hospital rounds. (HC)

2629 **Rural Health Research Centre, Narangwal, India. Laliberte, D., ed(s).** *Child health care in rural areas: a manual for auxiliary nurse midwives.* Bombay, Asia Publishing House, 1974. 364p. Engl.

This simply written, clearly illustrated manual was designed as a training aid and handbook for India's auxiliary nurse-midwives. The various chapters discuss the significance of vital statistics and the common causes of illness and death in children; the child health work of the auxiliary nurse-midwife in the context of the health team; the causes, transmission, and prevention of infectious diseases(hygiene and nutrition); the purpose and schedule of immunizations; child health assessment through history-taking and examination; care of the newborn (including what to teach the family and dai); drugs commonly administered by the auxiliary nurse-midwife and their use, storage requirements, and dosages; the administration of drugs and medicaments orally, externally, and by means of injection; treatment of common conditions; and recognition of symptoms requiring physician referral. Preparation of the manual in Hindi was under way at the time of its publication in English and the intention of making it available in all the regional languages was expressed. (HC)

2630 **Schaefer, M.** WHO, Geneva. *Administration of environmental health programmes: a systems view.* Geneva, WHO Public Health Papers No.59, 1974. 242p. Engl.
Also published in French.

This manual aims to provide administrators with systems guidelines that are attuned to the social and political constraints common to environmental health programmes. It comprises two parts: the first reviews

general concepts of environmental health and administration and their application and the second applies administrative procedures to environmental health. The book stresses that all environmental health programmes must receive acceptance and support from the population to be served, achieve distinguishable objectives and results, link their efforts with those of other health and socioeconomic development programmes, and accomplish their work economically. These basic principles underline the need for systematic administration. Flowcharts are included in the text to illustrate procedures and relationships. (AC)

2631 Shaper, A.G. Kibukamusoke, J.W. Hutt, M.S., ed(s). *Medicine in a tropical environment.* London, British Medical Association, 1972. 442p. Engl.

These essays review the medical problems that have been the subject of recent investigation in East Africa; they are grouped under these headings: infective and parasitic diseases; neoplasms; endocrine, nutritional, and metabolic diseases; diseases of the blood and blood-forming organs; mental disorders; diseases of the circulatory system; diseases of the digestive system; and diseases of the genitourinary system. In general, each disease is discussed according to its history, epidemiology, clinical presentation, diagnosis, and management and is accompanied by photographs. (HC)

2632 St. John Ambulance, Ottawa. *First aid. 3 edition.* Ottawa, St. John Ambulance, 1974. 248p. Engl.

This manual for laypeople spells out the principles of first aid and the information required to manage several emergencies. Concise and illustrated, it covers the responsibility of the first aider, priorities in first aid, the structure and functions of the body, emergency artificial respiration, treatment of an unconscious person, preparation of dressings and bandages, and transporting the sick or injured. It also details procedures for managing wounds and bleeding; shock; injuries to bones, muscles, ligaments, joints, eyes, head, neck, and spine; poisoning; heart attack; stroke; burns and scalds; cold exposure and injury; heat illnesses; diabetes; bites and stings; and miscellaneous other health problems. Appendices cover two methods of artificial respiration, splint application, and emergency childbirth. (HC)

2633 Stead, W.W. *Understanding tuberculosis today: a handbook for patients. 3 edition.* Milwaukee, Wis., Marquette University Press, Jun 1971. 32p. Engl. 9 refs.

This handbook, designed for patient education in the United States, provides a simple but comprehensive explanation of the nature, diagnosis, and treatment of tuberculosis. The author attempts to demystify tuberculosis and to reassure patients and their families that in most cases TB can be effectively treated through long-term cooperation with their physicians. The first sections discuss the four stages of tuberculosis in man and outline detection methods. Subsequent sections explain both hospital and outpatient treatment of the disease and give an annotated listing of medications most often prescribed. The preventive measures that are advocated are to avoid contact with infected persons, to acquire BCG vaccination, and to receive prophylactic medication for dormant TB. Case histories that underline the necessity for dedicated use of modern medication are appended and marginal notes, summaries, diagrams, cartoons, and a TB quiz are included to facilitate independent study. (LB)

2634 Taegar, A., McCalla, V. *Nutrition and food preparation.* In Cruikshank, R., Standard, K.L., Goldthorpe, G., Cook, R., eds., Manual for Community Health Workers, Mona, Jamaica, University of West Indies, Department of Social and Preventive Medicine, 1968, 59-70. Engl.
See also entries 569 (volume 1), 2454, 2455, 2558, 2582, 2583, and 2597.

Nutrition and food preparation are part of a course for community health workers in Jamaica; the text that serves as a basis for the course concentrates on the food value of local staples. It also discusses the importance of good nutrition and a balanced diet and includes menus that combine foods for growth, energy, minerals, and vitamins. The special dietary needs of infants, schoolchildren, pregnant women, the elderly, and invalids are also noted and cooking methods that preserve food value are described with emphasis on hygiene in food handling and storage. Suggestions for low-cost foods and kitchen gardens are presented and illustrate the feasibility of providing nutritious meals on a limited budget. Six sample recipes are included. (ES)

2635 Thomsen, B. Zambia, National Food and Nutrition Commission. *ABC of nutrition.* Lusaka, National Food and Nutrition Commission, Public Relations Unit, 1970. 31p. Engl.

This manual is a basic guide for the teaching of elementary nutrition in Zambia and is intended for use in agricultural or domestic sciences at secondary schools or in teacher training colleges. The first section provides an overview of food and the body, emphasizing how proper nourishment supports good health. Additional sections suggest local sources for, and explain the nutritional role of, protein, fats and carbohydrates, minerals, and vitamins. Also reviewed are types of malnutrition, including the cause, diagnosis, and treatment of overnutrition, marasmus, undernutrition, and kwashiorkor. The manual encourages breast-feeding and details the food needs of pregnant and lactating women, infants, and small children, concluding with suggestions for personal hygiene. A glossary, tables of weights and measures, and illustrations are included. (LB)

2636 Threadgold, N., Welbourn, H. *Health in the home.* Kampala, East African Literature Bureau, 1972. 87p. Engl.

This simple, illustrated guide to hygiene and child care in East Africa was first published in 1957. Its five sections cover the prevention of disease through personal

and environmental hygiene, care of the sick and injured (first aid), safe childbirth, antenatal and postnatal care (including instructions for home confinement), child care (clothing, washing, toilet-training, etc), and nutrition (including a number of recipes for infant feeding). A glossary of medical terms in English, Swahili, and Luganda is provided. (HC)

2637 UNICEF, New Delhi. *Special Child Relief: handbook for supplementary feeding site organizers.* New Delhi, UNICEF, South-Central Asia Region, 30 Nov 1975. 56p. Engl.
See also entry 2313.

This handbook serves as a reference guide for supplementary feeding-site organizers and supervisors working in the government-sponsored, UNICEF-supported, Special Child Relief programme in India. If reflects the programme's aims which are to provide not only food but also health services to pregnant women, lactating mothers, and children under age 6 living in areas devastated by drought, flood, etc. The text of the handbook comprises three sections that include tables and drawings illustrating the concepts and techniques being promoted. Section I briefly explains the goals and special features of the overall programme and section II lists the tasks assigned to supplementary feeding-site organizers and supervisors. The last section, which elaborates on the tasks, covers preparation and distribution of foods (Special Weaning Food, Balahar, and K-Mix-2), maintaining records, providing physical facilities, screening beneficiaries, delivering elementary health care, and undertaking follow-up and referral, as well as educating and involving the community in nutrition and preventive health measures. It also suggests eight simple educational messages and nine community activities and lists 11 drugs available from UNICEF with instructions to workers for dispensing them. (JT)

2638 University of Dar es Salaam, Dar es Salaam. *Standard notes for Tanzanian dispensaries.* Dar es Salaam, University of Dar es Salaam, Department of Preventive and Social Medicine, Dec 1970. 44p. Engl.
Experimental edition.

These notes, based on approved drug schedules for A and B dispensaries in Tanzania, are intended to serve as a quick reference tool for rural medical aids during their daily work. The contents include a list of approved and recommended drugs, drug storage procedures, an immunization schedule, a list of "notifiable" diseases (such as smallpox); procedures for referring patients to hospital, standard dosages for antibiotics, and the diagnosis, treatment, and prevention of 23 common diseases. (HC)

2639 USA, Department of Health, Education, and Welfare. Close, A.K., ed(s). *Nutrition education in child feeding programs in the developing countries.* Washington, D.C., U.S. Government Printing Office, 1976. 44p. Engl.

Intended for village health workers, this booklet aims to assist them in teaching mothers and children how to use local foods nutritiously. It is meant to be used in conjunction with child-feeding programmes so that the effect of the supplemental programmes will outlive the handouts. The booklet covers basic nutrition, goal-setting, teaching methods, working with mothers and preschool children, and reaching children within school feeding programmes. A preschool child's height and weight chart, a questionnaire for learning children's food habits, and a list of resource publications are appended. (AC)

2640 USA, Department of the Navy. *Nursing procedures.* Washington, D.C., Department of the Navy, 1973. 456p. Engl.

This manual was prepared for use by auxiliary health personnel in the U.S. Navy; it details fundamental nursing care of patients, hospital admission and discharge of patients, therapeutic measures, pre- and postoperative care, diagnostic tests, and techniques for isolating patients with infectious diseases. Each procedure is broken down into its purpose, equipment, steps, important points, and equipment care. Space has been left after each description for additional information. The manual contains steps as basic as bedmaking and as supplemental as gastric lavage, physical therapy, and bronchoscopy. Many of the procedures are illustrated and a table of abbreviations and an index are provided. (AC)

2641 Volunteers for International Technical Assistance Inc., Schenectady, N.Y. *VITA village technology handbook. Revised edition.* Schenectady, N.Y., Volunteers for International Technical Assistance, 1972. 387p. Engl. Refs.

The material collected in the village technology handbook by volunteer specialists is aimed at helping villagers in developing countries to master the resources available to them. It describes techniques and devices that can be made and used in villages by the inhabitants themselves. The handbook advises on water supply, water purification, health and sanitation, food processing and preservation, home improvements, etc. The book is illustrated with photos, drawings, and diagrams. Upon request, translations in languages other than English can be made available. (EE)

2642 WHO, Geneva. Passmore, R. Nicol, B.M. Rao, M.N., ed(s). *Handbook on human nutritional requirements.* Geneva, WHO Monograph Series No.61, 1974. 66p. Engl.
Also published in French.

Experts from the Food and Agriculture Organization and the World Health Organization have drawn up this handbook on basic human requirements in protein, vitamin A, vitamin B, vitamin D, ascorbic acid, thiamin, niacin, riboflavin, folates, cyanocobalamin, calcium, iodine, fluorine, and iron. They gathered information from technical reports in biochemistry, physiology, clinical medicine, epidemiology, and ecology and abstracted essential information designed for

use by food administrators, agricultural planners, applied nutritionists, secondary school teachers, and health educators. The book comprises nine chapters and includes tables on the recommended intake of nutrients matched for age and sex. (AC)

2643 WHO, Geneva. *Illustrations bank: collection d'illustrations.* Geneva, WHO, 1974. 107p. Engl., Fren.

This collection comprises 107 black and white line drawings (21 1/2 x 28 cm) to supplement health teaching. Pictures range from common sites of bedsores through human reproduction systems to first aid techniques. They also include diagnostic aids, diagrams of disease transmission, and common parasites. The composite could be used to complement courses in nursing, primary health care, sanitation, or first aid; the drawings are simple and could be easily reproduced or transferred to transparencies. They are labeled in French and English but not explained further. (AC)

2644 World Fertility Survey, London. International Statistical Institute, The Hague. *Training manual: guidelines to survey organizers on planning and execution of the training programme.* The Hague, N.V. Drukkeru Trio, WFS Basic Documentation No.4, Jan 1976. 83p. Engl.

This training manual, which is intended for use by those planning fertility surveys, explains the general concepts of conducting surveys and outlines training, mapping, pretesting, supervising, and reporting in research programmes. Most of the information can be adapted to subjects other than fertility and the authors have purposely designed the content so that it can be widely applied. There are seven sections comprising an introduction and chapters on training for preparation of the sample, pretesting and training, recruiting, selection and training of interviewers and supervisors, and recruitment and training of office editors and coders. Appendices include a pretest information sheet, examples of tests for applicants, and examples of text questions used to evaluate trainees' performance. (AC)

2645 World Fertility Survey, London. International Statistical Institute, The Hague. *Interviewers' instructions (for country adaptation).* The Hague, N.V. Drukkeru Trio, WFS Basic Documentation No.6, Oct 1975. 82p. Engl.

The World Fertility Survey (WFS) has prepared a manual for interviewers, a prototype adaptable to different cultural backgrounds. It is designed for fertility surveys but can be used as a simple tool for conducting interviews for other types of research. It introduces the reader to basic research concepts, such as the sample population, survey documents, and quality controls and explains the objectives and use of questionnaires. It is divided into two parts: the first focuses on general information about interviewing and the second deals with specific tasks of the interviewer using the fertility questionnaire. An appendix on a WFS fertility regulation module is included. (AC)

2646 Wyatt, G.B., Wyatt, J.L., Halestrap, D.J. *Medical assistant's manual: a guide to diagnosis and treatment.* Singapore, McGraw-Hill International Health Services Series, 1973. 512p. Engl.

This training manual is designed to prepare medical assistants for the tasks of diagnosis and treatment. Material covered includes: the purposes of a health service and the work of a medical assistant, the causes of diseases, history taking and medical examination, communicable diseases and their control, diseases of different parts of the body, pregnancy and childbirth, infertility and family planning, care of young children, nutritional disorders, diseases of the mind, abnormalities requiring surgical intervention, injuries, and emergencies and their treatment. Lists of drugs (their administration, dosages, and side effects), equipment for a dispensary, terms used in this manual, and a symptom index as an aid to diagnosis are also included. Numerous illustrations appear throughout the text. (HC)

IV.7.2 Family Planning and Midwifery

See also: 2104, 2119, 2595, 2602, 2612, 2613, 2617, 2629, 2643

2647 Berndtson, B., Bogue, D.J. *Mass mailing manual for family planning: manual of procedures.* Chicago, University of Chicago, Community and Family Study Center, Communications/Media Monograph No.1, 1972. 114p. Engl.

In this instruction manual for promoters of family planning, the authors discuss such aspects as audience, editorial planning, organization, writing and editing, art work and photography, printing, addressing and mail preparation, costs and budgets, and research and evaluation. Sample illustrations, printshop floorplans, photographs of mail preparation systems, and estimated budgets are among the details included. (RMB)

2648 Colombia, Ministerio de Salud Publica. *Eficiencia del metodo de instruccion programada en el adiestramiento de auxiliares de enfermeria. (Efficiency of the programmed instruction method in the training of nursing auxiliaries).* Bogota, Ministerio de Salud Publica, 1974. 14p. Span.

To promote better training of nurse auxiliaries, the Colombian Ministry of Public Health conducted an experiment using a method of programmed instruction based on training manuals containing short, sequential lessons. One group of 24 students was instructed in family planning techniques and maternal child health using this method, a control group was taught the same material by the traditional methods of lecture and classroom discussion, and a third group was taught by a combination of the traditional and programmed methods. The students were tested before, immediately following, and 2 months after completing the training course; the formulas used to calculate their scores are

explained and the results are tabulated. In general, the auxiliaries who had been instructed by the programmed method scored an average of 34 points higher on the second examination than on the first, as compared to 33 points for students trained by the combination method and 26 points for those trained by traditional methods. However, between the second and third examinations the programmed group also forgot more of what they had learned. Nevertheless, the authors conclude that the programmed instruction method is just as efficient as, and in many ways easier than, other methods and they recommend both the method and the training manuals used in the experiment. (RMB)

2649 **Cox, H.** *Midwifery manual: a guide for auxiliary midwives.* Singapore, McGraw-Hill International Health Services Series, 1971. 240p. Engl.

The primary purpose of this manual is to instruct the midwife auxiliary in the management of normal pregnancy and delivery and to guide her in the handling of emergencies while awaiting medical assistance. The manual also aims to assist the midwife in her role as health educator. To this end, a number of chapters on health teaching, family care, communicable diseases, family planning, elementary nursing, first aid, and health centre organization have been included. The manual is written in simple language and is clearly illustrated by means of line drawings. (HC)

2650 **Cox, H.** WHO, New Delhi. *Study guide for auxiliary nurse-midwives.* New Delhi, WHO, 1969. 187p. Engl.

This study guide was prepared to help India's auxiliary nurse-midwives understand the content of their textbooks and class notes. It follows closely the condensed curriculum guide in the Indian Nursing Council's syllabus for auxiliary nurse-midwives. It constitutes a list of questions with answer spaces for these topics: the nurse and nursing in India, the structure and functions of the human body, personal and community health, patient care in the hospital, elementary nursing care, child development and common disorders of childhood, health problems in India, midwifery, and community nursing (i.e., organization of community health services and the function of the auxiliary nurse-midwife). Some diagrams for the student to label are included. (HC)

2651 **Haire, D., Haire, J.** International Childbirth Education Association, Hillside, N.J. *I: Nurse's contribution to successful breast-feeding. II: Medical value of breast feeding.* Hillside, N.J., International Childbirth Education Association, 1974. 72p. Engl. 138 refs.

Appeared also in Haire, D., Haire, J., Implementing Family Centered Maternity Care with a Central Nursery, Hillside, N.J., International Childbirth Education Association, 1968.

This document, intended for use by nursing personnel in hospitals in the United States, covers all aspects of breast-feeding and includes innovative approaches and methods that make it a valuable reference text for everyone involved in maternity care. The first of two main sections guides and instructs nurses and mothers about the basics of breast-feeding, emphasizing appropriate instruction and urging nurses to give consistent advice. It concludes with a checklist of breast-feeding problems, including reasons for concern, likely causes, and suggested remedies. The second section of the booklet provides information on many benefits of breast-feeding and aims to influence professionals positively so they will motivate mothers to breast-feed. This section presents ample evidence that the protective benefits of colostrum and breast milk do not end at weaning but are carried over into later years. (JT)

2652 **Hector, W., Bourne, G.** *Modern gynaecology with obstetrics for nurses. 5 edition.* London, William Heinemann Medical Books, 1973. 282p. Engl.

This textbook stresses the psychological and sociological aspects of gynaecology and obstetrics and explains nursing procedures and routine care of convalescing patients. Separate chapters deal with female physiology; examination of the patient; pre- and post-operative treatment; diseases of the ovaries, Fallopian tubes, uterus, vagina, and vulva; venereal diseases; problems of fertility; gynaecological operations; pregnancy; abortion; labour and delivery; and maternal-child care. There are numerous illustrations and the manual, which is in its fifth edition, has been updated to include new techniques, such as laparoscopy, the use of ultrasound in diagnosis, and the latest methods of therapeutic abortion and pregnancy testing. (RMB)

2653 **National Institute of Family Planning, New Delhi.** *Guide to extension work in family planning.* New Delhi, National Institute of Family Planning, NIFP Monograph Series No.12, Mar 1973. 34p. Engl.

This manual was compiled to help health personnel and others implement India's family planning programme. It aims to acquaint married couples with the positive relationship between small family size and family welfare, the modern methods of birth control, and the sources of birth control supplies and services and to break down any physical or psychological barriers to their seeking or procuring a birth control method. These topics are covered: the principles of extension education, e.g., people respond better to education programmes within their cultural milieu; the techniques and methods of extension education (lectures, films, teaching aids, etc.); the extension worker as a member of a team; and the why and how of programme planning and evaluation. The importance of day-to-day evaluation is stressed, for the impact and efficiency of the programme can be maximized by rapidly identifying useful leads and experiences and feeding these back into the operational framework. (HC)

2654 **Papua New Guinea, Department of Public Health.** *Midwifery manual for community health nurses. 5 edition.* Port Moresby, Department of

Public Health, Maternal and Child Health Section, 1973. 175p. Engl.
See also entry 1229 (volume 2).

This manual, which has been regularly revised since its first publication in 1958 by the Papua New Guinea Department of Public Health, is an abbreviated version of a standard textbook in obstetrics. Intended for nurses working in well-equipped specialized units, it includes few recommendations for people outside hospital settings other than first-aid measures and referral to hospital. The text includes an explanation of basic anatomy and physiology of the foetus and the female reproductive system; theory on pregnancy, parturition, and puerperium; the nurse's role and duties in obstetrics; obstetric operations; and a brief outline of family planning methods. A section on the newborn outlines routine care and examination, neonatal illnesses and injuries, and congenital malformations. Lists of obstetric drugs and definitions, causes of delay during labour, and reasons for calling a doctor are appended, as are instructions for setting up trays and trolleys to be used in the labour ward and the operating theatre. (JT)

2655 Peng, J.Y., Ross-Larson, S., Subbiah, M. University of Michigan, Ann Arbor. National Family Planning Board, Kuala Lumpur. *Utilization of traditional birth attendants (kampong bidans) for family planning in Malaysia: a working manual for nurses. 2 edition.* Kuala Lumpur, National Family Planning Board, 1 Jan 1974. 32p. Engl.

The training of traditional birth attendants, *kampong bidans*, in Malaysia provides vital support to the family planning programmes of rural health centres. The *kampong bidan* motivates her patients to accept family planning, invites them to visit the local centre for examination by a nurse, issues contraceptives, maintains follow-up, and checks on defaulters. This booklet explains the duties and responsibilities of the *kampong bidan* in a national family planning project; details the administrative procedures to be followed by both the local nurse-supervisor and the national board; outlines the 3-day training course curriculum for supervisors and practitioners with intensive discussion of motivation techniques, roles, and the importance of record keeping; and suggests criteria for assessment of the *kampong bidan*'s practice. (ES)

2656 Philippines, Department of Health. *Hilot teaching guide.* Manila, Department of Health, Bureau of Health and Medical Services, Division of Maternal and Child Health, n.d. 42p. Engl.
See also entries 1289 (volume 2), 2657, and 2658.

This guide contains 10 units outlining a course in midwifery practices for *hilots* (traditional birth attendants in the Philippines). Each unit presents a list of objectives for staff and students followed by two parallel columns headed "content" and "teaching/learning activities." The division between the two categories is not clearcut; each column may include topics for lecture/discussions, demonstrations, visual aids and learning-by-doing exercises that spell out what to do rather than how. At the end of units 1-9, a section assigns tasks to the teachers and pupils and solicits contributions from them for the following unit's work. The information varies in detail and assumes the tutor is knowledgeable in obstetrics and has access to other resources for specific subjects, equipment, materials, etc. Topics covered are infection, pre- and postnatal care, labour, the newborn, family planning, the delivery kit, and birth registration. Instructions and illustrations for preparing a flannelgraph of the birth of a baby, diagrams of a home delivery setup, a page from a *hilot* record book, and a visual aid reminder for birth registration are included. The guide's 45 objectives indicate the content, methods, and philosophy of the training and the first and last units attempt to establish the roles and relationships of staff and to encourage follow-up and evaluation. (JT)

2657 Philippines, Department of Health. *Hilot record book.* Manila, Department of Health, Bureau of Health and Medical Services, Division of Maternal and Child Health, n.d. 16p. Engl., Filipino.
See also entries 1289 (volume 2), 2656, and 2658.

Printed in English with subtitles in Filipino, this small record book is issued to traditional birth attendants in the Philippines (*hilots*) as an aid to collecting information for birth registration. It has space for 64 entries comprising name of father and mother, name and sex of child, address, and date and time of birth. The front cover has space for recording the *hilot's* name and address and her attendance at follow-up meetings. On the back cover there are reminders about giving babies early supplementary feeding and BCG and DPT immunizations (two doses). A family planning slogan also appears. (JT)

2658 Philippines, Department of Health. *Good hilot helps the mother in her barrio.* Manila, Department of Health, Bureau of Health and Medical Services, Division of Maternal and Child Health, n.d. 20p. Engl.
See also entries 1289 (volume 2), 2656, and 2657.

This handbook is designed for use by the midwife, nurse, or *hilot* (traditional birth attendant) in the rural areas of the Philippines as a checklist of obstetric procedures and as a teaching aid for maternal health care. It contains simple, easily reproduced drawings and brief notes highlighting essentials of antenatal, parturition, and postnatal care. Information includes advice on diet and hygiene, an illustration of the home delivery kit for *hilots*, and an explanation of signs of abnormal pregnancy. The book emphasizes the importance of hygiene and the need to keep full records of births. (MG)

2659 Roderuck, C.E. *Nutrition and the need for family planning.* In Home Economics and Family Planning: Resource Papers for Curriculum Development, Washington, D.C., American Home Economics Association, 1974, 44-51. Engl. 32 refs.
See also entry 2661.

This review of literature emphasizes the importance of improving the health status of women during their reproductive years, of limiting the world's population, and of integrating family planning with social and health training. One source cited claims that maternal mortality records throughout history have shown that for women of all races the period of reproduction is one of risk, since pregnancy, parturition, and lactation make extraordinary demands upon their bodies and are accompanied by additional health hazards. Another source describes the effects of a health programme at Pholela Health Centre in South Africa, where infant and preschool child mortality was high; the programme reduced infant mortality and almost eliminated pellagra and kwashiorkor. The connection between low birth-weight infants and poor maternal nutrition is explored and a case is made for child-spacing, since the percentage of premature births and low birth-weight infants increases as the intervals between parturition and succeeding conceptions decrease. A programme in Nigeria is described in which a study of dietary intakes of several tribes was the basis for demonstrations on food preparation. The children of mothers who participated grew better than those whose mothers did not. (EE)

2660 Tengve, B., ed(s). *Obstetrics and gynecology for medical assistants.* Bumbuli, Tanzania, Medical Assistant's Training Centre, 1973. 242p. Engl.

This manual for Tanzanian medical assistants and their teachers brings together 37 articles written by 10 doctors from 2 hospitals, a medical college, and a university. It devotes more space to diagnosis and management than to aetiology or microscopic pathology and stresses the value of encouraging people to attend maternal and child health clinics and the importance of recording good medical histories for all patients. Covering the subjects taught in the medical assistant syllabus, it also reviews common obstetric and gynaecological problems, including emergencies and problems that require referral to hospital. The book does not purport to be exhaustive or definitive and teachers may need to adapt and supplement it. (JT)

2661 Thompson-Clewry, P. *Preschool child malnutrition: a case for family planning.* In Home Economics and Family Planning: Resource Papers for Curriculum Development, Washington, D.C., American Home Economics Association, 1974, 52-55. Engl. 10 refs.

See also entry 2659.

The vicious circle of poor nutrition and lowered resistance, infectious disease and severe malnutrition, which is prevalent in developing countries like Sierra Leone, can be broken at the food production level through low-cost production of protein-rich foods, prevention of infection through environmental sanitation, and parental education. In Sierra Leone, kwashiorkor and marasmus have an almost identical incidence and a statistical breakdown of infant and child mortality caused by both diseases indicates that the death rate in rural areas is almost twice that in urban areas. Infections are particularly significant in relation to malnutrition. According to the author, it has been shown that, in childhood, malnutrition does not occur for dietary reasons alone. There are environmental, social, economic, and cultural factors, including poverty, inadequate housing, infections, and large-sized families. Many communities in developing countries have become accustomed to high child wastage and a high birthrate is required to compensate for it. In the long run, mortality and fertility are interrelated. A reduction in infant mortality would motivate parents to have fewer children and a reduction in the number of births per woman would reduce infant mortality and improve the health status of both mother and surviving children. Thus, family planning is a basic element in raising health status and in reducing child mortality and governments should consider promoting family planning programmes that emphasize improved nutrition for preschool children. (EE)

V. Formal Evaluative Studies

V.1 Health Manpower

See also: 2135, 2459, 2468, 2479, 2549, 2681, 2708, 2718

2662 **Kane, R.L., McConatha, P.D.** *Men in the middle: a dilemma of minority health workers.* Medical Care (Philadelphia), 8(9), Sep 1975, 736-743. Engl. 18 refs.

Navajo employees of the U.S. Indian Health Services (IHS) serve as cultural and linguistic liaison between white professionals and Navajo people, but they have been hampered in their work by conflicting loyalties to their community and their employer. This was a finding based on data from two 1970 studies: a survey of Navajo consumers and a survey of IHS personnel (Navajo and white staff members) at the Shiprock Service Unit. Different questionnaires were used, but all the respondents were asked what they believed to be the reservation's most pressing health needs. Ninety-nine percent of the Navajo consumers' responses revolved around disease states, alcoholism, environmental health, and transportation, but only 28% of Navajo health workers' responses and 20% of those of white professionals related to these areas. Indeed, findings indicated that Navajo health workers and white professionals agreed more with each other than with the Navajo consumers. It is concluded that Navajo health workers have become a marginal elite akin to the bureaucratic, urban citizens of postcolonial developing nations and that their effectiveness has been greatly reduced. (HC)

2663 **National Institute of Health Administration and Education, New Delhi.** *Health care by multipurpose workers at subcentre level.* New Delhi, Coordinating Agency for Health Planning, Jun 1973. 10p. Engl.
Unpublished document.

A survey and a pilot study were conducted in one of India's health districts to provide a basis for organizational and administrative changes in the health delivery system. Findings revealed that weaknesses in the existing system were a lack of integrated curative and preventive services; overcentralization of administrative and financial powers; poor management; inadequate training, supervision, and job definition of all staff; subordination of all health programmes to the family planning programme; and a lack of a system for supplying medicines and equipment. Based on survey results, changes were introduced but were limited because of resistance from upper- and middle-level administrators. The most important change was that many single-purpose workers were trained as multipurpose workers called community health workers; other modifications included a simplified record-keeping system (appended), a system of vital statistics collection, and a reactivation of the subcentres that had fallen into disuse. The community health workers performed well and were accepted by their communities; however, their supervisors did not take an interest in the programme and a special family planning campaign disrupted their work. New job descriptions for all levels of health workers are proposed and appended. (HC)

2664 **Peru, Ministerio de Salud.** *Estudio sobre necesidades de capacitacion del personal del Ministerio de Salud: informe preliminar. (Study of training needs of Ministry of Health personnel: preliminary report).* Lima, Ministerio de Salud, 1973. 9p. Span.

In 1970, the Peruvian School of Public Health initiated an 18-month national survey to assess the training needs of health personnel and to establish guidelines for specialized, postgraduate courses in public health. Of the total 12 624 health professionals in Peru, 97.6% filled out questionnaires concerning their academic backgrounds, particularly in public health. This report lists the percentages of health workers who have already taken courses in public health and pinpoints some of the critical problems: 62.4% of physicians directing health centres have had no training in public health; the scarcity of middle-level health positions has made it impossible to organize courses for this level; and, generally, health auxiliaries have low academic standards. Statistical data on the results of the survey are included. (RMB)

2665 **Reinke, W.A.** ***Summary tabulations and comments concerning job analysis study.* Port Moresby, n.p., 29 Sep 1970. 43p. Engl.**
Unpublished document.

The tasks performed by professional nurses are compared to those of nursing auxiliaries, including nursing aides, orderlies, and students, in this job analysis study of two Papua New Guinea hospitals. Each hospital ward is considered separately and the required tasks are broken down into categories, such as technical nursing, basic nursing, administration, domestic duties, and

miscellaneous duties. which include personal time and absence from the unit. The results of the observations are recorded in the form of statistical data with commentaries by the author. (RMB)

2666 **Sive. P.. Iron. E.. Telpaz. N.** *Hitpatchut avodat-zevet bemarpaah. (Teamwork in a family medicine clinic).* Family Physician (Tel Aviv). 2(1). 1972. 44-49. Hebrew. 9 refs.
Abstracts in English and French.

From 1968-1971. two full-time physicians. one part-time pediatrician. four public health nurses. and a medical social worker formed a health team in a periurban community in Israel. They worked with other agencies in the area and succeeded in providing comprehensive medical management of the families under their care. In addition. they offered health team training for students entering their disciplines. They modified the role of the family nurse to assume responsibility for supervising follow-up in the homes of patients. The social worker undertook the psychosocial assessment and management of personal and family problems. following team discussions and agreement on the family diagnosis. The health team introduced special sessions for the aged. formed a discussion group for pregnant women. and held consultation sessions with a visiting psychiatrist. (Modified author abstract.)

2667 **Vogel. L.C.. Swinkels. W.. Sjoerdsma. A.C.** *Spectrum of behaviour and decisions of clinical officers: an analysis of decisions made by clinical officers at the government hospital. Kiambu. Kenya.* East African Medical Journal (Nairobi). 53(4). Apr 1976. 226-235. Engl.

A 5-day survey in 1974 at Kiambu Hospital in Kenya provided a profile of the behaviour and duties of nine clinical officers (medical assistants) and enabled investigators to define the "ideal" clinical officer. Data were collected for 2 998 patients who attended the hospital's outpatient department from 28 October to 1 November. All the patients received a card upon entering the department and carried it with them until they completed their visit. Health personnel. who treated them. entered relevant information about diagnosis. pharmaceuticals. elapsed time. etc.. onto their cards. Every patient was seen first by a clinical officer who screened them and recommended diagnostic tests. drugs. etc. Findings indicated that the nine clinical officers prescribed an average 1.49 drugs per patient and they varied greatly in prescribing habits and productivity. Based on the findings. the investigators recommend that clinical officers use a high proportion of prepackaged or coded drugs. adjust their schedules according to the seriousness of presenting health problems. prescribe few injections. limit additional investigations. and conform to established working hours. Desired characteristics. according to investigators. are an ability to accept managerial responsibility. a consciousness of costs in prescribing. and a good capability for diagnosing ailments. Statistical data are included. (AC)

2668 **Yodfat. Y.. Fidel. J.. Eliakim. M.** Hadassah University Hospital. Jerusalem. *Analysis of the work of nurse-practitioners in a family practice and its effects on the physicians' activities.* Journal of Family Practice (Tel Aviv). 4(2). Feb 1977. 345-350. Engl. 14 refs.
See also entry 2363.

A teamwork system was introduced in a family health centre in a rural area 30 km from Jerusalem. Its three main goals were to provide better medical care to the community. to increase the status of the nurse to that of a co-partner in the nurse-physician team by allowing her to screen patients. and to provide the physician with more time to deal with patients. Nurse practitioners. who receive 18 months basic training. were employed in the centre for 3 years. Total staff consisted of two physicians. one qualified nurse. one medical secretary. and five nurse practitioners. Four of the nurse practitioners worked in eight villages while the fifth worked in the largest village. Each nurse practitioner was responsible for about 100 families. comprising 700-900 individuals. They provided primary care at a village clinic and undertook home visiting. referring infants with fever or gastroenteritis and any patients with persisting symptoms. Furthermore. they kept records of all chronic patients. supervised their care. and visited them regularly. During the first year (1970). the nurse practitioners visited the centre three times a week and spent a few hours with the physician. learning simple procedures. taking blood pressure. and discussing problems related to patients' diagnoses and treatments: they also attended regular staff meetings. This system had a very marked influence on the social and medical status of the nurse practitioner; patients relied increasingly on the nurses' judgment and decisions and. during the study. the nurse practitioners handled 67% of all patient visits without consulting the physician. No cases of negligence or delay in administering proper treatment were detected. (EE)

V.2 Organization and Administration

See also: 2177. 2190. 2361. 2375. 2663. 2693. 2694

2669 **African Medical and Research Foundation International. Nairobi.** *Medical development. Mali.* Nairobi. African Medical and Research Foundation International. Oct 1972. 32p. Engl.

A study team from the African Medical and Research Foundation International (AMRFI) surveyed the **health services in Mali and recommended changes based on their observations. The team visited health facil**ities. interviewed personnel. and examined the country's economic realities. It discovered that most of the country's health personnel were employed in the federal government in the capital (Bamako). that all training took place in Bamako. that lack of communications media totally isolated rural areas. and that the existing

health units needed to be reorganized to promote efficiency. Recommendations arising from the study dealt with staff, communications, supplies, hospital and dispensary services, and miscellaneous developments. They included proposals to relocate medical personnel charged with special tasks, such as training auxiliaries, organizing outreach activities, etc. from the capital to outlying hospitals and dispensaries; to set up a radio communications network; to overcome transportation problems by purchasing and using 61 landrovers and 12 lorries; to restore hospitals and dispensaries and expand their ancillary services (laboratory, X-ray, etc.); and to train village volunteers to provide basic first aid and preventive care. Cost estimates of recommendations are presented. (AC)

2670 **Banerji, D.** *Social and cultural foundations of the health services systems of India.* Inquiry (Chicago), 12(2), Jun 1975, Suppl., 70-85. Engl. 97 refs.
Eighth World Congress of Sociology, Toronto, Canada, 23 Aug 1974.
For complete proceedings see entry 2196.
Although modern medicine has made impressive gains in both curative and preventive care over the past decades, health care and sanitation in India have actually lost ground due to political, social, and economic influences. The country's health services enjoyed illustrious beginnings around 3000 BC, flourished in 10th century AD, declined under Moughal rule, and were dealt a fatal blow by the British occupation. The services initiated by the British were established for the colonials and later extended to the native elite. When they introduced medical training, it was fashioned on the British model and open only to the elite. The graduates assumed the colonial value system of the British rulers and became a brand of brown Englishmen. They occupied leadership positions in India and perpetuated class distinctions and the status quo even after independence. They introduced legislation that provided for increased health care for the rural masses but nullified its impact by legislating that health system changes should not modify the basic government machinery. Since then, vast quantities of money have been invested in erecting urban hospitals and dispensaries; the recurring costs for these institutions account for more than three-fourths the annual health budget but serve only about one-fifth the population. The few attempts at improving health services in rural areas have failed. The primary health centres and health subcentres established by the government to meet rural needs have been poorly staffed and equipped and have projected an unflattering image due to staff prejudices and activities. One of the most damaging activities has been the family planning programme, which is characterized by coercion and ineffectiveness. (AC)

2671 **Chang, W.P., Halonen, M.** *General evaluation and assessment of health center's activities in a selected number of health centers in Ethiopia.* Gondar, Ethiopia, Department of Preventive Medicine and Public Health, Haile Selassie I Public Health College and Training Center, Mar 1971. 18p. Engl.
Unpublished document.
The first step toward reorganizing health services in Ethiopia was a study of four rural health centres. Investigators examined the centres' monthly reports, family folders, inpatient records, census figures, inventories of medical supplies, etc., and interviewed staff and local officials. Findings were that health workers spent 50% of their time in curative care, infectious diseases and minor injury accounted for 85-89% of the centres' caseload, prescriptions were limited to a small number of drugs and antibiotics were overused, staff lacked history-taking skills, maternal and child health services were weak, and the importance of obtaining an accurate census for planning purposes was not appreciated. Recommendations from the study were that the centres' activities be reoriented toward preventive medicine, that personnel be given more practical training, that supervisory and referral channels be strengthened, and that the health centre record system be standardized and simplified. (HC)

2672 **de Winter, E.R.** *Health services of a district hospital in Malawi.* Assen, Netherlands, Van Gorcum, 1972. 303p. Engl.
A number of possibilities for developing basic health services in Malawi are explored and a 2-year pilot project whose aim was to identify the most effective "health centre method" is documented. The services of the Nkhata Bay District Hospital were mobilized to introduce a number of health and health education programmes (nutrition, health education, sanitation, maternal and child health, etc.) into a test village. The impact of these programmes on the behaviour and health of the villagers was carefully assessed and compared with baseline data that had been collected in the test village prior to the introduction of services and in a control village where health services were virtually nonexistent. Survey methods are described, baseline and evaluation data are tabulated, and a detailed chronological record of observations is provided. It is concluded that mobilization of a district hospital's services can indeed upgrade the health of a community but that it is impossible to identify the most effective method of doing so in view of the tremendous cultural differences within the country. The author recommends, rather, that future research take the form of exploratory projects that constantly evaluate and adjust themselves to changing conditions. This book constitutes a valuable source of background information, vital statistics, health statistics, and information on available health services in Malawi. (HC)

2673 **Gunawan, L.A.** Indonesia, Ministry of Health. *Studies on the health care delivery system.* Surabaya, Indonesia, National Institute of Public Health, Ministry of Health, n.d. 8p. Engl.
Unpublished document.

An investigation into the government health system in Indonesia, which constitutes a network of health centres serving populations of approximately 30 000, revealed that government services were generally underutilized and that two-thirds of the people either sought care from private practitioners (legal and illegal) or treated themselves. These findings prompted a study to introduce and monitor changes aimed at improving quality of service or reducing costs. An operational model using a standardized drug supply, a standardized equipment list, optimal fee structure, staffing pattern, operating manuals, a referral system, and a maternal and child health package was implemented in four health centres and two control centres were chosen for comparison. After 2 years, attendance rates in the four experimental centres had risen by 22%, 58%, 11%, and 69% respectively, whereas in one control centre attendance had dropped by 14% and in the other it had risen by 5%. A baseline survey to evaluate the model further is under way and plans are to duplicate the study in a larger district (regency). (HC)

2674 **Hyndman, G., W'Oigo, H., Sjoerdsma, A.** Royal Tropical Institute, Amsterdam. *Report on the data collection at Kiambu Outpatient department, Mar 1974: a report for the Kenya-Netherlands Project for Operations Research in Outpatient Services.* Nairobi, Medical Research Centre, 13 Nov 1974. 46p. Engl.

See also entries 2197, 2677, 2678, 2679, 2680, 2682, 2683, 2684, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

Three months after the outpatient department of Kiambu Hospital, Kenya, set up headquarters in a new building, a survey of operations was undertaken and the findings were compared with data from the old department. From 11-17 March 1974, 16 observers recorded when patients arrived and departed; how long they spent at the injection room, pharmacy, minor theatre, X-ray department, etc,; whether or not they were attending the department for the first time; which clinical officer they consulted; how many and which injections, drugs, or dressings they were given; and their age and sex. This information was then coded on a patient record card, put on computer cards, and tabulated using programmes for validation, average waiting time (by central waiting room arrival time), average waiting time (by station arrival time), distribution of waiting time, length of queue, statistics, and flow. The results of the data collection are set forward in 52 tables and 32 graphs and a floor plan of the outpatient department is included. (HC)

2675 **Lashman, K.E.** USA, Department of Health, Education, and Welfare. *Syncrisis: the dynamics of health. XIV. Zaire.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS)75-50,019, Jun 1975. 179p. Engl.

See also entries 1322, 1342, 1343, 1353, 1354, 1355, (volume 2), 1985, 1987, 1991, and 2002 (volume 3).

This study on Zaire is the 14th in a series of documents that examine the health problems prevalent in different countries and their implact on socioeconomic development. It contains information drawn primarily from sources within the USA – books, journals articles, international organization reports, etc., but it includes some data from Zaire publications and the author's interviews with Zaire officials. One problem in compiling data was the lack of a national system for data collection, although existing estimates of crude death rate range from 20 to 23 per 1 000 population and cumulative child mortality (aged 0-5) is estimated to be as high as 500 per 1 000. These figures could be substantially reduced through the institution of mass immunization campaigns, health education, sanitation, and nutrition supplements, but the lack of a viable national health structure impedes the coordination of services. The current government health system is strongly oriented toward curative care and serves a scant 25% of the population. The few programmes that have been suited to the rural needs, such as projects in maternal child health, family planning, and disease control, have been implemented since 1970 and cover only a small percentage of people at risk. Recommendations based on these findings include substantial government reorganization and investment in the field of health and family planning. (AC)

2676 **Lazes, P.M., Wasilewski, Y., Redd, J.D.** *Improving out-patient care through participation: the Newark experiment in staff and patient involvement.* International Journal of Health Education (Geneva), 20(1), Jan-Mar 1977, 61-70. Engl. 12 refs.

In 1973, a study was undertaken in a metabolic clinic for diabetic patients (USA) to determine the reasons for the clinic's poor quality care and to devise a remedy. For 3 months, investigators met formally and informally with staff and patients and coupled their observations with the results of an extensive (bilingual) questionnaire completed by 140 patients. They found that the clinic had no protocol for care and lacked continuity in both staff and care. Thus, staff provided inadequate treatment, education, and counseling of patients; kept them waiting for excessively long times; frequently lost patients' charts and laboratory results; did not follow up treatment; and duplicated each others' efforts. To alleviate these problems, a staggered appointment system was initiated, a centralized method for making and canceling appointments was established, a permanent schedule for doctors and nurses was introduced and coordinated with the staggered appointment system, bilingual cards were drawn up to inform patients of their next appointment, and follow-up procedures to contact patients who missed appointments were devised. A clear clinical routine was also initiated to ensure that blood pressures, weight, urine testing, and necessary laboratory work were done for each patient and weekly workshops were held to educate patients in controlling and monitoring their condition, medication, nutrition, etc. After 18 months, patients who kept appointments had increased from 52 to 71% and they

were observed to take a more active part in their health care by soliciting information from health workers. Each of the new procedures is described in detail. (HC)

2677 **Maina-Githinji, E.** Royal Tropical Institute, Amsterdam. *Outpatient's and the staff satisfaction with the filtering system.* Nairobi, Medical Research Centre, 1976. 6p. Engl.
East Africa Medical Research Council Conference, Nairobi, Kenya, Feb 1976.
See also entries 2197, 2674, 2678, 2679, 2680, 2682, 2683, 2684, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

One hundred and eighty-nine patients and 22 staff members of the Kiambu District Hospital (Kenya) were asked if they were satisfied with the "filtering system" in the outpatient department. The patients were interviewed upon entering and leaving the department and their answers revealed that more than 50% of the respondents came to the department with no particular diagnosis or treatment in mind; of those who had a particular treatment in mind, 52% expected an injection; 93% of the arriving patients expected to recover, but only 69% of the departing patients anticipated recovery; complaints about the clinical officers were very few; complaints about the medicine were more common; educated patients were more likely to complain about long queues and waiting time; and patients aged 31-40 voiced the most complaints. Staff members were satisfied with the filtering system, because it allowed them to finish work on time; all the clinical officers, however, preferred working the second rather than the first line. Staff-patient relationships were considered positive because of language compatibility. It is suggested that future studies concentrate on neutral issues such as expectation of recovery, medicine, etc., and avoid questions that elicit criticism of persons, because patients appeared reluctant to criticize the staff. (HC)

2678 **Maina-Githinji, E.** Royal Tropical Institute, Amsterdam. *Study of the acceptability of the daily maternal and child health clinics in Kiambu District Hospital between January 1975 and July 1975 (phase IIA).* Nairobi, Medical Research Centre, 1975. 12p. Engl.
See also entries 2197, 2674, 2677, 2679, 2680, 2682, 2683, 2684, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

A study was undertaken at a district hospital in Kenya to determine whether or not clients preferred a single, daily clinic for all maternal and child health services (antenatal, child welfare, and family planning) to a once-a-week clinic for each and whether or not the clients responded differently when interviewed in the clinic rather than in their homes. A questionnaire was administered in the clinic to 30 women (10 for each service) who had experienced both arrangements and then to 30 more in their homes. The responses were: 72% of the clients noticed a positive change in clinic arrangement; the change was deemed convenient because a client who missed her appointment could come on the next day; the change was most appreciated by child welfare clients and, contrary to expectations, least appreciated by family planning clients; 70% of the clients felt that the daily clinic reduced waiting time; and 32% felt that treatment standards had improved, 40% felt standards had declined, and 26% withheld comment. Additional comments, elicited through informal discussion, revealed that some clients disapproved of the long tea-breaks taken by staff and others disliked being told to come back the following morning when they arrived in the afternoon. Clients' responses were more positive when obtained in the home, because they were under no strain and had more time to ask questions and formulate answers. It was recommended that, in view of its high degree of acceptability, the combined daily clinic be continued. (HC)

2679 **Malone, M.** Royal Tropical Institute, Amsterdam. *Assessment of the quality of care as delivered in the ante-natal clinics at a district hospital in Kenya: a second study in June 1975.* Nairobi, Medical Research Centre, 1975. 1v.(various pagings). Engl.
See also entries 2197, 2674, 2677, 2678, 2682, 2683, 2684, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

Following the introduction of a new medical record card for patients in the antenatal clinic of one of Kenya's district hospitals, antenatal care was evaluated for the second time using a sample of 59 women and the same standards as in the previous study. By the audit method, 93.2% of the care was considered adequate if points were allowed for dispensing prepacked ferrous sulfate tablets to each patient, 88.2% if not. By the implicit judgment of process method, one of the judges considered all of the care inadequate, while the other two agreed that 72.9% of it was inadequate. The judges' comments were that: histories were still incomplete; inaccurate findings seemed to indicate that the midwife did not understand the significance of the examinations she performed; despite the fact that any woman who appears anaemic is to be tested, no mention of haemoglobin value appeared on any of the charts; tetanus toxoid was administered in a haphazard fashion; no definite advice was given to at-risk women as to place of delivery; almost none of the women had been given a pelvic assessment; no health education had been given; and some unnecessary referrals to the medical officer were noted. The author comments on the two methods of evaluation and suggests that the predetermined criteria be reassessed in the light of the facilities available as well as the risks connected with certain conditions. (HC)

2680 **Malone, M.** Royal Tropical Institute, Amsterdam. *Pilot project: an assessment of the quality of care as delivered in ante-natal clinics at a district hospital in Kenya.* Nairobi, Medical Research Centre, 1975. 1v.(various pagings). Engl.
See also entries 2197, 2674, 2677, 2678, 2679, 2682, 2683, 2684, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

The quality of care dispensed by midwives in an antenatal clinic at a district hospital in Kenya was assessed. A sample of 144 women, who had been systematically selected from a total of 531 attenders during an 8-day period, were seen by staff, then examined by an evaluator and the findings compared (the "audit" method). The evaluator's records then were examined independently by three experienced judges (the "implicit judgment of process" method) and care was assessed as adequate or inadequate. By the audit method, 28.5% of the care was considered adequate if points for dispensing prepacked ferrous sulfate tablets to each patient were included, 15.3% if not. By the implicit judgment of process method, all the care was considered inadequate by two of the judges and the history-taking inadequate by the third. The third judge considered 77.7% of the care adequate or at least not dangerous for the patient. It is concluded that the antenatal card used in the clinic is of little help to the midwife in either eliciting a history or performing an examination, that routine procedures performed on each woman generate fatigue and boredom in the staff, and that the absence of refresher courses or the fact that the midwife never gets the chance to see a case through to its outcome may be responsible for the lack of interest in and poor processing of antenatal cases in the clinic. (HC)

2681 **McBride, T.C., Ralph, J.R.** *Assessing quality of care in a university health service using tracer method.* Journal of the American College Health Association (Ithaca, NY), 24(3), Feb 1976, 150-153. Engl.

The tracer method is a means of evaluating the quality of care in an outpatient facility. It uses as indicators a set of carefully selected and defined health care problems called tracer conditions. Criteria for selecting tracer conditions are that they are easy to diagnose and prevalent enough to permit adequate data collection, have well-defined and established treatment methods, and respond well to medical care. Procedures for managing tracer conditions form the basis for an evaluation worksheet that is used to analyze patient records and determine the quality of treatment received. This method has been employed to evaluate the quality of care administered by doctors and nurse practitioners in an American university health service and after 2 years has successfully reduced common omissions in the management of the tracer conditions. Samples of the criteria for care and the evaluation worksheet are included. (HC)

2682 **Royal Tropical Institute, Amsterdam.** *Daily MCH clinics in Kiambu District Hospital Jan-Jun 1975: a report for the Kenya-Netherlands Project for Operations Research in Outpatient Services.* Nairobi, Medical Research Centre, 4 Nov 1975. 42p. Engl.

See also entries 2197, 2674, 2677, 2678, 2679, 2680, 2683, 2684, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

As a step toward integrated maternal and child health services, the Kiambu District Hospital, Kenya, began offering integrated antenatal, child welfare, and family planning clinics every work day. Previously, the clinics had been held separately once a week. Six months later, a 2-week survey was conducted to determine the effects on quality of service, cost, and patient satisfaction. Observers recorded waiting and service time for 767 women and investigators analyzed costs of labour and materials and assessed client satisfaction by means of interviews and informal discussions. It was observed that spreading the work over the week resulted in lower attendance rates, shorter queues, and a decreased mean length of time in the clinic from 157 minutes, recorded in December 1974, to 85 minutes. Other findings were that underutilization made the new setup more costly per patient-visit than was the old. Although 10% of patients were not pleased with the changes, 65% liked them because of greater flexibility and convenience. Their reasons included the possibility of attending two clinics during the same visit, the possibility of attending on the day of one's choice, and the decrease in waiting time and crowding. The greatest degree of affirmation came from the child welfare clients, the least from the family planning patients. (HC)

2683 **Swinkels, W.** Royal Tropical Institute, Amsterdam. *Operational study of the filtering process.* Nairobi, Medical Research Centre, 1976. 6p. Engl.

East Africa Medical Research Council Conference, Nairobi, Kenya, Feb 1976.

See also entries 2197, 2674, 2677, 2678, 2679, 2680, 2682, 2684, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

In order to determine whether or not the "filtering" process in the outpatient department of the Kiambu District Hospital (Kenya) provides more diagnostic time for seriously ill patients and reduces overall patient waiting time, a 5-day study involving 3 900 patients was conducted. Upon entering the facility, each patient was given a card upon which was recorded his characteristics (age, sex, new patient or reattender), path through the building, the time at which he received each service, diagnosis, and treatment. These data were then compared with data obtained prior to the introduction of the filtering system. Findings revealed that: all new patients – 54% of the total – were filtered; one in six of these was filtered "in," i.e., deemed seriously ill; waiting time increased for those filtered "in" but decreased for those filtered "out," i.e., sent directly to the treatment units; overall waiting time increased slightly; service time for those filtered "in" doubled from 1.6 minutes to 3.2 minutes; and males and females of all ages were filtered "in" in approximately the same proportions. It is concluded that more diagnostic time is being allotted to seriously ill patients but that waiting time has merely been displaced from one area of the department to another. The filtering system is recommended only to those facilities where three or more clinical officers are available for diagnosis. (HC)

2684 **Swinkels, W., Sjoerdsma, A., W'Oigo, H.** Royal Tropical Institute, Amsterdam. *Operations of Kiambu MCH clinics December 1974: a report for the Kenya-Netherlands Project for Operations Research in Outpatient Services.* Nairobi, Medical Research Centre, 1975. 51p. Engl.

See also entries 2197, 2674, 2677, 2678, 2679, 2680, 2682, 2683, 2685, 2695, 2696, 2703, 2704, 2705, and 2706.

An operational study was conducted in December 1974 in the maternal and child health clinics of the Kiambu District Hospital, Kenya, and the results compared with those of a similar study conducted the previous June. Information on waiting time, service time, and some general characteristics of all attenders was recorded by observers stationed in different parts of the clinic during a 2-week period. They observed that total waiting time increased almost 50% in all MCH clinics between June and December, with one in every seven or eight patients waiting over 4 hours; the ratio of total clinic time to actual service time deteriorated from 16:1 in June to 25:1 in December; clients made an average of 2.7 antenatal visits per pregnancy as compared to 2.9 in June; the number of clients coming to the child welfare clinic increased. The deterioration in waiting/service time is attributed to late clinic starts and long staff tea breaks. It is concluded that "the speed with which good service can deteriorate should never be underestimated." (HC)

2685 **Swinkels, W., W'Oigo, H., Sjoerdsma, A.** Royal Tropical Institute, Amsterdam. *Operations of Kiambu outpatient department in October 1974: a report for the Kenya-Netherlands Project for Operations Research in Outpatient Services.* Nairobi, Medical Research Centre, 14 Feb 1975. 1v.(various pagings). Engl.

See also entries 2197, 2674, 2677, 2678, 2679, 2680, 2682, 2683, 2684, 2695, 2696, 2703, 2704, 2705, and 2706.

In October 1974, the third operational study of the Kiambu outpatient department (OPD), Kenya, took place. The study aimed to evaluate minor changes that had been introduced on the basis of earlier studies, to determine whether or not waiting times had been reduced, and to collect information on diagnostic and treatment patterns. The investigators distributed record cards to all patients entering the OPD during 5 working days and observers at various stations within the OPD recorded waiting times on each patient's card; the holder's age, sex, clinical officer, diagnosis, and treatment were also recorded. Records of 3 603 patients indicated a decrease in overall waiting time and length of queues despite a significant increase in attendances. Also, clinical officers showed increased productivity that had been easily absorbed by the treatment stations. Diagnosing and prescribing patterns emerged and these and other findings are elucidated in some 40 tables and 19 graphs. A sample of the record card used in the study is appended. (HC)

2686 **Trussell, R.E., Arbona, G.** Columbia University, New York. Puerto Rico, Department of Health. *Medical and hospital care in Puerto Rico: a report submitted to the governor and the legislature of the Commonwealth of Puerto Rico.* San Juan, Department of Health, Feb 1962. 427p. Engl.

The results of a study of the health services of Puerto Rico have been reported in this monograph. They comprise data from a household survey of 2 951 families, observations of the quality of medical and hospital care, an investigation of the organization and administration of health services, career studies of health personnel, a survey of nursing resources, and an examination of the country's health facilities, costs, and financing. From July 1958 to June 1960, the study investigators conducted personal interviews with 14 651 family members, sent out and followed up questionnaires to 1 350 health personnel, surveyed 140 education facilities, and employed qualified hospital administrators to inspect administration, organization, and facilities in 14 hospitals. They also analyzed existing information and data. Findings, which are set forth in 96 tables, indicated the inefficiencies and deficiencies in the system and pointed the way for future changes. Recommendations, arising from the study, numbered more than 50 and aimed at upgrading health services, although no means for financing the changes have been suggested. (AC)

2687 **WHO, Geneva.** *WHO/UNICEF joint study on alternative approaches to meeting basic health needs of populations in developing countries.* Geneva, WHO, 1975. 122p. Engl.

Twentieth Session of the UNICEF/WHO Joint Committee on Health Policy (JCHP), Geneva, Switzerland, 4-6 Feb 1975.

A combined WHO/UNICEF study was undertaken to identify innovative approaches to health services delivery in developing countries. One hundred and thirty members of WHO advisory panels were asked for case studies of promising programmes and they supplied 80 contributions. From these reports, 10 promising programmes were chosen for further investigation: health services development in Bangladesh; health care in the People's Republic of China; the Cuban health care system; Tanzania's rural development and local self-sufficiency plan; Venezuela's programme of simplified medicine; a health education programme in a disadvantaged district of Yugoslavia; a rural health project in Jamkhed, India; the use of village health workers and trained traditional birth attendants in the Department of Maradi, Niger; the use of Ayurvedic medicine in India; and the two-way radio scheme in northern Nigeria. These 10 approaches are described and their most important characteristics are analyzed with a view to incorporating some of them into WHO/UNICEF policies. (HC)

V.3 Planning

See also: 2105, 2210, 2479, 2663, 2698, 2740

2688 **Rao, P.S., Fernandez, S.R., Rajamanickam, C.** *Seasonal variation in personal health expenditure of rural populations.* Indian Journal of Medical Research (New Delhi), 62(12), Dec 1974, 1881-1887. Engl.

A study to determine seasonal effects on personal health expenditures of a rural population in southern India was undertaken from 1970-1973 and the results indicated that there were significant seasonal variations. The sample, which comprised 843 randomly selected families, was divided into three groups for study during the rainy, winter, and summer seasons. Each group exhibited an equal range in family size, socioeconomic status, and proximity to the nearest town. Individuals were interviewed weekly for 5 weeks during each season to establish the pattern of expenditures and the financial status of 113 representative families was investigated to determine seasonal variations. The findings showed a consistent pattern of health spending, but families with more than five members always spent a greater amount. The highest expenditure occurred during the rainy months when morbidity was fairly high, the diet substandard, and income low. Next was the winter season, when the good dietary intake and income resulting from harvested crops was offset by the high incidence of disease. Recommendations arising from this study are that subsidies be provided for medical care during the rainy season and that a community health investment plan be established to channel summer savings into anticipated expenditures later in the year. Statistical tables relating health expenditures to per capita income, family size, community group, and area of residence are included. (ES)

2689 **Russell, A., Marcus, J.** *Jerusalem Infant and Child Development Center: a model for comprehensive community service.* In Jarus, A., Marcus, J., Oren, J., Rapaport, C., eds., Children and Families in Israel: Some Mental Health Aspects, New York, Gordon and Breach, 1970, 415-426. Engl. 37 refs.

The Jerusalem Infant and Child Development Center, which is devoted to vulnerable or handicapped children, aims at providing comprehensive services in regional centres throughout Israel. The core is an independent unit within a central institution, which cooperates with hospital, public health agencies, etc. The centre's clinical services, which are extended to children handicapped at birth, those at high risk, and those who develop unsuspected handicaps, comprise the assessment and treatment of handicapped children and their families. The teaching activities primarily revolve around undergraduate medical and psychology students, but symposia for postgraduate students have been initiated and a model day nursery or kindergarten, which would greatly expand research opportunities, has been proposed. Some research projects are under way and studies into the mechanisms for coping with handicap and the psychological, emotional, and neurophysiological development of handicapped children have been suggested. (AC)

V.4 Geographic Distribution of Health Services

See also: 2105, 2675, 2686, 2718

2690 **Collado Ardon, R., Rivera Castro, A.** *Sugerencias de los medicos para mejorar su distribucion en el pais. (Suggestions by physicians for the improvement of national distribution of physicians).* Salud Publica de Mexico (Mexico City), 17(5), Sep-Oct 1975, 661-667. Span.

A 1972-1973 survey of 2 590 Mexican physicians revealed that 28% of those interviewed felt that the problem of unequal physician distribution in Mexico could best be solved by the Mexican health care institutions themselves, which could increase the salaries of rural doctors or assign physicians to understaffed areas on an involuntary basis, among other possibilities. Another 25% of those sampled suggested that the federal government should establish health care and educational institutions in rural areas, thus producing a local crop of rural doctors who would not be tempted by the lures of urban practice. Some 22% of the physicians questioned thought that teaching institutions should train doctors to have a social conscience or else enforce a programme of obligatory rural service. Other solutions proposed by the remaining 25% of the sample depended on the general development of the country, the cooperation of state and municipal governments, and the participation of the private sector. The exact results of the survey are listed in detail. The authors note that the majority of the doctors interviewed, regardless of the particular solution they favoured, stressed the need for decentralizing both health care and educational institutions. This survey was part of a university research project on medical practice in Mexico. (RMB)

2691 **Datta, S.P., Kale, R.V.** *Operational research study in primary medical care in Pondicherry.* Indian Journal of Preventive and Social Medicine (Varanasi, India), 1, Sep 1969, 65-72. Engl. 11 refs.

Medical records compiled for 1967 at Ramanathapuram (India) primary health centre were examined to determine numbers of families using the curative, preventive, and midwifery services; the inpatient and outpatient load; the average length of stay; and the morbidity pattern of the population. Findings were that, of the 1814 families in the catchment area, 51% were using the curative services, 18% the antenatal, 11% the postnatal, 18% the well-baby, and 0.5% the family planning. Almost all (95%) of those using outpatient, inpatient, and midwifery services were from within 2 miles of the centre. Forty-seven percent of outpatients and 31% of inpatients were children under 14 and many of the total 393 inpatients came from outside the

catchment area. Average inpatient stay was 2 days and leading primary diagnoses were upper respiratory tract infection, diarrhea, anaemia, myalgias, and vitamin deficiencies. These findings indicate that the population using the centre does not entirely correspond to the one for whom it was intended; it would seem, therefore, that a health centre's catchment area should only be assigned after careful study. (HC)

2692 Gunawan, L.A. *Health services in the Regency of Pasuruan: a study in the utilization of the rural health centre.* Surabaya, Indonesia, National Institute of Public Health, Ministry of Health, n.d. 27p. Engl.
Unpublished document.

Government health centres in the Regency of Pasuruan, Indonesia, are underutilized despite comparatively high mortality and morbidity. An examination of the possible reasons, which include perceived severity of disease, educational level of the population, health centre accessibility, economic status of the population, proximity of private practitioners, and quality of care, suggests that the main causes are the inaccessibility of the health centre (i.e., the size of its catchment area) and the quality of care. The author proposes a mathematical formula to calculate the desired catchment area for each health centre and suggests that efforts be made to improve services by means of a "closed circuit health system," that more active participation and coordination with local community development committees be encouraged, and that postgraduate training in management and planning be made available for physicians. (HC)

2693 Lundin, S. Chilalo Agricultural Development Unit, Addis Ababa. *Survey of health facilities of Arussi: 1969-1970.* Addis Ababa, Chilalo Agricultural Development Unit, CADU Publication No.57, n.d. 123p. Engl.
See also entries 2726, 2727, and 2728.

A survey of health facilities in Arussi province, Ethiopia, which was undertaken from October to December 1970, revealed that 17 government and 34 nongovernment institutions were serving the estimated population of 854 500 scattered over 23 500 square miles. The investigators were a registered nurse and a physician. They visited the health facilities in the province and interviewed the authorities. Facilities comprised 1 provincial hospital, 4 health centres, 12 health stations, 10 mission clinics, and 24 pharmacies; staff were 6 doctors, 8 public health officers, 7 sanitarians, 19 registered nurses, 10 community nurses, 25 advanced dressers, 78 elementary dressers, 10 laboratory technicians, and 10 school dressers. Data indicated that only 1.2% of infant deliveries were given medical assistance; that the maternal child health services were reaching 4-8% of the target group; that the provincial hospital was not being used to capacity; that the provincial health department was weak from lack of administrative leadership, communications, and funds; that health stations did not have adequate supervision so they provided high cost care for a small proportion of the population; that the mission clinics were providing most of the health care; and that former dressers were practicing far beyond the legal regulations. Recommendations resulting from the survey included establishing a radio communication system, appointing a qualified director to the provincial health department, regularly sending mobile teams from the health centres to visit and advise the health stations, introducing a vaccination programme, etc. Statistical data are included and questionnaires are appended. (AC)

2694 Mejia, A., Pizurki, H. WHO, Geneva. *World migration of health manpower.* WHO Chronicle (Geneva), 30(11), Nov 1976, 455-460. Engl.
Also published in French, Russian, and Spanish.

A WHO study of physician and nurse migration suggests a slowdown in the present health manpower brain drain; this trend has materialized as major recipient countries increase their own production of medical personnel, place more reliance on auxiliaries, and legislate for stricter licencing of foreign physicians. In 1971, 6% of the world's practicing doctors were expatriates; 75% of these were employed in the USA, the U.K., Canada, the Federal Republic of Germany, and Australia, and only 9% in developing countries. Statistical data have been compiled on migration and the net loss or gain of physicians in individual nations and lists of countries and the percentages of native physicians and nurses lost in 1973 are included in the text. The study indicates that migration is directly related to the health workers' financial expectations. A survey of 40 countries indicates that nations with a *per capita* gross domestic product under $800 lose from 10-60% of their native physicians through emigration, countries with a GDP of $800-2 000 lose under 10%, and countries with a GDP of more than $2 000 attract physicians from abroad. Conclusions from the study are that: physicians tend to migrate from countries whose health care policies favour the public sector to those whose policies favour the private sector, there is no relationship between migration and urban/rural maldistribution, there is a strong relationship between migration and language of tuition, and physician and nursing curricula encourage migration, because they teach students to deal with the health problems of affluent societies rather than those of developing countries. Follow-up studies are urged. (RMB)

2695 Munywoki, S., Shimoni, M., Hyndman, G. Royal Tropical Institute, Amsterdam. *Satisfaction among outpatients visiting four health units in Kiambu district, Kenya.* Nairobi, Medical Research Centre, 1974. 20p. Engl.
Unpublished document; see also entries 2197, 2674, 2677, 2678, 2679, 2680, 2682, 2683, 2684, 2685, 2696, 2703, 2704, 2705, and 2706.

A survey of Kiambu district, Kenya, was conducted in 1972 to investigate people's attitudes toward the four health units in the area and to relate their level of education with their satisfaction. Investigators hypothesized that the higher a patient's education, the less satisfactory would be the services. On six different occasions patients attending Kiambu, Tigoni, Nazareth, and Ruiru health units were interviewed and their answers

recorded on a questionnaire. Responses were tallied for 594 patients. Findings were that one-third of the total study group and 96% of Nazareth's patients were not attending the unit nearest their home, 51% of Nazareth patients and 3% of those attending other units had been referred by nonmedical personnel, and patient waiting time at Nazareth was as much as 2 1/2 times longer than at the other units. Still, Nazareth patients did not complain to any greater extent and 96% of them claimed to be highly satisfied with their treatment. Another finding was that Nazareth attracted significantly more men, patients of higher education, new patients, and chronic care patients than did the other units. Based on these findings, the main conclusion is that Nazareth patients perceive their treatment as better because they are treated by a physician and charged for the services; the expected inverse correlation between level of satisfaction and education was not borne out in the findings. (HC)

2696 Munywoki, S., Shimoni, M. Royal Tropical Institute, Amsterdam. *Pilot study on utilization of medical services in ten medical facilities in Kiambu district.* Nairobi, Medical Research Centre, 1973. 25p. Engl.

See also entries 2197, 2674, 2677, 2678, 2679, 2680, 2682, 2683, 2684, 2685, 2695, 2703, 2704, 2705, and 2706.

As part of the research involved in the development of a model system of district outpatient services for Kenya, a study was undertaken to determine the geographic distribution and basic characteristics of the outpatients attending Kiambu District Hospital and the nine surrounding health units. For 7 full working days at each of the 10 facilities, outpatients were interviewed and the following information elicited: age, sex, sublocation, name of subchief, means of travel to facility, cost of travel, person referred by, and whether the visit was an initial or follow-up one. In all, 24 237 outpatients were interviewed. Findings were that 92.6% of the outpatients at Kiambu Hospital were residents of the district's 27 sublocations; 57.1 were female; adults accounted for 41.8% of all attenders, under-fives for 34.4%, and children (6-14 years) for 23.8%; 52.1% of attenders walked to the facility, 43.3% took a bus, 3.7% walked and took a bus, and 1% used bicycles; 54.7% paid no transportation fare while 37.2% paid between $.05 and $1.00; 67.7% were new attenders; and 57.8% were not referred to the facility by anyone, 38% were referred by relatives, 2.9% were referred by friends, and 1.2% by other health units. (HC)

2697 Soetopo, M.H., Soemana, P., Rahasdjo, N., Suparto, H., Tjindarbumi, W., Bastaman, M. *Hospital utilization study in Indonesia: a study on the utilization of fifteen regency level hospitals.* Surabaya, Indonesia, National Institute of Public Health, Ministry of Health, Research Report Series No.1, 1973. 38p. Engl.

Underutilization of 15 hospitals in Indonesia prompted a thorough investigation of patient records, staffing patterns, hospital equipment, and attitudes of the population served. The study, which was conducted from June to November 1972, covered hospitals that provided first-level referral care. Examination of patient records revealed that the hospitals' caseload consisted of complications of pregnancy, childbirth, and puerperium; infectious and parasitic diseases; trauma and poisonings; and diseases of the respiratory system. Bed occupancy rate was low (18-60%), hospitalized patients came mainly from the immediate vicinity of the hospital, and 38% of those hospitalized had had no previous contact with a medical service. A household survey (incomplete) revealed that only one-third of those in need of hospitalization were hospitalized; other findings were that hospital equipment was adequate for emergency care although lacking in support services (laboratories, kitchens, etc.) and that staff initiative and ability varied considerably from hospital to hospital. Recommendations based on the study are that additional efforts and funds be expended to increase hospital effectiveness and efficiency; that more appropriate training be devised for medical, paramedical, and administrative staff; and that studies of the population's attitude toward hospitalization be undertaken. Twenty-three tables of statistical data are appended. (HC)

V.5 Financial Aspects

See also: 2324, 2667, 2675, 2682, 2690, 2693, 2740, 2757, 2784

2698 Ambawani, G.J., Mehta, D.C., Kachhia, R.D. *Outpatient morbidity statistics and cost on drugs per illness episode from Kaira rural district (Gujarat): study of a 5% sample of illness episodes.* Indian Journal of Public Health (Calcutta), 18(4), Oct-Dec 1974, 179-188. Engl.

A 1-year study in the rural district of Kaira, India, was conducted to determine drug costs per illness episode and to test the feasibility of estimating overall morbidity from a sample of outpatients' diagnoses. Thirteen of the district's 25 primary health centres were randomly selected and instructed to use standard serial numbers for their outpatients and to record age, sex, residence, and cost of treatment per illness episode. From these data, a 5% sample comprising 40% illness episodes was forwarded to the central statistical unit of the Health Directorate (Hyderabad) for coding and processing. Findings were that reporting, on the whole, was encouraging and complete; however, a rather high percentage of the diseases were classified as "other specified and ill-defined." In addition, the sample provided a representative picture of morbidity in Kaira but might have proved more valuable if it had included 5 000 episodes. (HC)

2699 **Hospital Practice, New York.** *Health care in Caracas and Lima: oil makes difference.* Hospital Practice (New York), Sep 1976, 133,136,138-139. Engl.

A comparison of health services in Lima and Caracas suggests that money makes the difference. Although their national governments are both committed to social reforms, Venezuela's elected officials have the financial resources to support a programme of free health care to all, whereas Peru's poverty-stricken military government can offer free health care only to mothers and children. Another example is in the programmes for the capital cities' septic fringe (squatters who have migrated to the city to make their fortunes and have settled on the outskirts, erecting makeshift housing, such as blanket tents, cardboard shacks, etc.). The Venezuelan government has launched a low-cost housing project of highrises in which apartments may be purchased reasonably, whereas the Peruvian government cannot afford to plan for Lima's hopeful migrants. There are many such examples and most can be attributed to the availability of funds. However, dollars aren't the only difference between the two countries. For example, the family planning policy in Venezuela is to promote and support an extensive family planning programme; in Peru, where 45% of the population is under 15, the State and the Church both oppose family planning promotion. (AC)

2700 **Hu, T.W.** *Financing and the economic efficiency of rural health services in the People's Republic of China.* International Journal of Health Services (Westport, Conn.), 6(2), 1976, 239-249. Engl. 27 refs.

Despite the success of the barefoot doctor programme in the People's Republic of China, health care beyond the most basic level is more expensive for patients than outside observers have been led to believe. Although there are three different types of noncompulsory health insurance, the costs of a major operation can easily exceed a worker's monthly salary and impose on him a severe financial burden. Because the health care system is decentralized, the prices vary widely as do the quality of care and the ways in which patients can be reimbursed for medical expenses. However, a cost-benefit analysis of China's barefoot doctor services indicates that, in terms of man-year productivity gains and losses, they are both socially and economically beneficial. The reported reduction in working days lost and the amount of waiting and traveling time saved are benefits of the service and have been contrasted with the costs of training and services. (RMB)

2701 **Laugesen, B.M.** *Clinic network for pre-school children and their mothers with special reference to costs.* Indian Pediatrics (Calcutta), 12(1), Jan 1975, 137-139. Engl.

A hospital-based team and a mobile health team provide comprehensive maternal and child health care to a population of 200 000 in India. They operate a stationary clinic at the hospital and hold weekly mobile clinics in 20 different villages. The costs have been held down by requiring patients to keep their own health records, using jet injectors with concentrated vaccines to reduce cost and time per immunization and to permit delegation of the task to aides, delegating the management of anaemia to a laboratory technician, employing a health educator to teach mothers to prevent and control malnutrition with a high protein food supplement ("Hyderabad mix") made from locally available ingredients, requiring communities to provide buildings for the clinics, and charging the patients a fee-for-service. Self-sufficiency of such clinics is deemed feasible in cities and towns but not in villages of fewer than 3 000 people. (HC)

2702 **Mei, J. van der, Belcher, D.W.** *Comparing under-five programmes in a hospital-based clinic and in satellite mobile clinics.* Tropical and Geographical Medicine (Haarlem), 26(4), Dec 1974, 449-456. Engl. 12 refs.

In 1972, studies were made at Agogo Hospital, Ashanti Region, Ghana, to compare the results obtained by mobile clinics for children under age 5 with those of the hospital under-fives' clinic with regard to attendance, immunization status, and costs. Findings were that satellite clinics held at 2-week intervals attracted the same proportion of under-fives as the daily hospital clinic. The satellite clinics also achieved the same percentage of young children with DPT and measles vaccinations as was reached in the community where Agogo Hospital is located. The cost per patient-visit to a satellite clinic was slightly lower than that for patients attending the hospital under-fives' clinic. These results support more widespread implementation of mobile clinic programmes to meet current unmet health needs. (Modified author abstract.)

2703 **Vogel, L.C., Sjoerdsma, A., Shimoni, M., W'Oigo, H.** Royal Tropical Institute, Amsterdam. *Use of drugs in an outpatient department and ways and means to simplify pharmacy administration: results of two years' experiments in Machakos.* Nairobi, Medical Research Centre, 19 Jan 1973. 5p. Engl.

East Africa Medical Research Council Annual Conference, Nairobi, Kenya, 5-10 Feb 1973.

See also entries 2197, 2674, 2677, 2678, 2679, 2680, 2682, 2683, 2684, 2685, 2695, 2696, 2704, 2705, and 2706.

In September 1970, a standardized list of coded, prepacked drugs was introduced in the outpatient department of Machakos Hospital (Kenya) to simplify pharmacy administration; 2 years later, a survey was conducted to determine the effect of the change on treatment patterns. The numbers and cost of drugs/injections prescribed to a randomly selected sample (17.5%) of the total number of clients during a 1-week period were calculated and compared with baseline data collected in 1968. The survey revealed that: the number of patients being treated increased by 25% between 1968 and 1972, the number of injections increased by 27%, the number of prescriptions for tablets increased by 134%, the number of prescriptions for

mixtures increased by 53%. and the number of injections and prescriptions per staff member increased by 83% and 67%. reducing labour costs by 48% and 40% respectively. However. savings from increased productivity were offset by a 40% increase in the number of prescriptions per new patient. It is concluded that increased prescribing on the part of the medical assistants was a direct result of the introduction of coded drugs. (HC)

2704 **W'Oigo, H., Swinkels, W., Vogel, L., Sjoerdsma, A.** Royal Tropical Institute. Amsterdam. *Some economic aspects of health services at Kiambu OPD. Oct 1974: an internal KNEPOROS report.* Nairobi. Medical Research Centre. 1975. 18p. Engl.
See also entries 2197. 2674. 2677. 2678. 2679. 2680. 2682. 2683. 2684. 2685. 2695. 2696. 2703. 2705. and 2706.

As a basis for future planning. a study was undertaken in the outpatient department of the Kiambu District Hospital. Kenya. to determine its operating costs. Only labour and "variable" expenses. i.e.. disposables. reagents. solvents. basic drugs. water. electricity. etc.. were taken into consideration: fixed costs. such as building space. furniture. and equipment. were omitted. Information was obtained from files. registers. inventory stores, and KNEPOROS reports and calculated for activities and services rendered during office hours (7:00-16:00 hours) over a 5-day week and during 24 hours over a 7-day week. In addition. each function of the department – injection room. dressing room. pharmacy. laboratory. and X-ray – was broken down separately and quantified in terms of Kenyan shillings. The total costs of running the department during a typical full (24-hour/7 day) week is summed up: labour. Ksh. 5 615 (or 65% of total): materials. Ksh. 3 039: total. Ksh. 8 654: and cost per patient. Ksh. 1.85. Sixteen tables of data are presented. (HC)

2705 **W'Oigo, H., Swinkels, W., Sjoerdsma, A.** *Economy of the Kiambu hospital OPD during a one week survey (11-17 Mar 1974).* Nairobi. Medical Research Centre. 30 Jan 1975. 13p. Engl.
Unpublished document: see also entries 2197. 2674. 2677. 2678. 2679. 2680. 2682. 2683. 2684. 2685. 2695. 2696. 2703. 2704. and 2706.

Costs in manpower and materials for operating the outpatient department of Kiambu Hospital. Kenya. were calculated for 11-17 March 1974 as a basis for estimating future costs and effecting economies. Calculations were based on information from files. registers. inventory stores. and relevant medical records. Where information was not available. figures were estimated. The cost per patient in the pharmacy. laboratory. X-ray department. dressing room. etc.. was tabulated and the health care dollar divided into its components: water and electricity. 3.2%; salaries. 60.6%: injections. 5.7%: drugs. 25.1%; dressing room materials. 2.3%: laboratory reagents. 1.4%: minor theatre materials. .7%: and radiography supplies. 1.0%. From the figures and observations. the investigators concluded that some economies were possible if enrolled nurses in the injection and dressing rooms were replaced by ungraded nurses. No attempt was made to establish whether the services were being fully utilized. (HC)

2706 **W'Oigo, H.O.** Royal Tropical Institute. Amsterdam. *Cost analysis of the MCH clinics at Kiambu District Hospital in 1974: an internal report of the Kenya Netherlands Project for Operations Research in Outpatient Services.* Nairobi. Medical Research Centre. 1975. 8p. Engl.
Unpublished document: see also entries 2197. 2674. 2677. 2678. 2679. 2680. 2682. 2683. 2684. 2685. 2695. 2696. 2703. 2704. and 2705.

During a 2-week operational study in December 1974. labour and supply expenses were recorded for the maternal and child health clinics (antenatal. child welfare. and family planning) run by the Kiambu District Hospital. Kenya. The data gathered were later supplemented by information from the hospital's 1974 annual report and then analyzed. The final statistics showed that the three clinics treated 16 394 patients in 1974. that labour costs (wages. social security premiums. etc.) were Ksh. 65 177 a year. that the annual cost in drugs was Ksh. 19 437. and that the cost per patient-visit averaged Ksh. 3.98. The high cost of labour was attributed to less-than-full utilization rates of the three clinics. A clinic-by-clinic breakdown of costs is included. (HC)

V.6 Cultural Aspects

See also: 2327. 2330. 2466. 2662. 2672. 2746. 2768

2707 **Benyoussef, A., Wessen, A.F., Phan Tan, T., Souissi, H.** WHO. Geneva. *Services de sante: couverture. facteurs et indices d'utilisation. (Health services: coverage. factors and indices of utilization).* Bulletin of the World Health Organization (Geneva). 51(2). 1974. 111-132. Fren. 36 refs.
English summary.

A review of health services utilization studies carried out during the past 20 years provided a baseline for devising technically simple and inexpensive study methods that have since been applied in Tunisia. The method essentially combines a household survey with an analysis of medical records of a sample population. In the Tunisia study. three urban and four rural areas were investigated and the demographic and socioeconomic features of the respondents were elicited. The respondents were questioned to determine their perception of the need for care and advice. their experience of and attitude toward the health services. and their recourse to self-treatment or traditional medicine. Medical records were available for only 38.5% of the sample

population; these showed that urban dwellers were more likely to use the services than were rural dwellers and that extensive users were more literate than occasional users and were more familiar with preventive techniques. The study suggests that the utilization of health services may be regarded as an indicator of modernization and that improvement in health may depend not only on the impact of the health services but also on the process of change in society. (Modified author abstract.)

2708 Bhatia, J.C., Vir, D., Timmappaya, A., Chuttani, C.S. *Traditional healers and modern medicine.* Social Science and Medicine (Oxford), 9, Jan 1975, 15-21. Engl. 20 refs.

This study of practice patterns and characteristics of traditional medical practitioners in India was undertaken in 1972-1973; its aim was to determine the practitioners' attitudes toward participating in a proposed governmental rural health scheme. Ninety-three indigenous medical practitioners (IMPs) in three Indian states were interviewed and results revealed that 12% of the IMPs had diplomas from nonaccredited schools; 33% had no professional qualifications; 73% were registered with the licencing boards; 90% were dispensing modern medicine; 74% possessed thermometers, 87% syringes and hypodermic needles, and 69% stethoscopes; two-thirds performed minor surgery; and only one-sixth were interested in joining the proposed rural health scheme. The most significant finding was that many IMPs professed a preference for indigenous medicine but felt they were forced by popular demand to practice modern medicine. Further study is recommended. (HC)

2709 Collado Ardon, R., Garcia Torres, J.E. *Actitud de los medicos en Mexico respecto a los curanderos. (Attitude of Mexican physicians toward traditional practitioners).* Salud Publica de Mexico (Mexico City), 17(4), Jul-Aug 1975, 459-470. Span.

In 1972-1973, a University of Mexico project team interviewed 2 487 urban and rural Mexican physicians to assess their attitudes towards *curanderos,* traditional practitioners who provide the only medical care available to some 24 million rural inhabitants. The interviewers' questionnaire proffered these responses: punish the *curanderos*, eradicate them and strip them of their authority, put limitations on them, educate the people not to patronize them, replace them with qualified doctors, accept them since there are not enough qualified doctors to replace them, train them to the extent of their capabilities, and, no response. From their analysis of the data collected, the authors conclude that 43% of the physicians surveyed were completely opposed to *curanderos*, 23% were moderately opposed, and 33% were tolerant or positive. Findings revealed no significant correlation between attitudes and place of practice, although the authors suggest that, in many cases, the doctors' ignorance about *curanderos* and about the limitations of existing health services and their fear of professional competition may have contributed to negative responses. Statistical data on the distribution of Mexican physicians and their attitudes toward *curanderos* are included. (RMB)

2710 Dhillon, H.S., Srivastava, V.P. India, Ministry of Health and Family Planning. *How people perceive illness and what they do when they fall sick: a study of curative behaviour in an urban community.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, Technical Series No.29, Research Paper No.28, 1972. 35p. Engl.
Unpublished document.

A study was undertaken in an urban community in Delhi, India, to determine how illness is perceived and what patterns of treatment are followed. Forty families who had an infirm member were interviewed. Study findings revealed that illness was only perceived as such if accompanied by fever, pain, or incapacitation; concern was greatest for the health of earning members and family heads; home remedies were tried before clinical treatment was sought; people mentally graded physicians and illnesses and shifted to a "better" physician as a condition deteriorated; the allopathic (Western) system of medicine was sought exclusively or in combination with other systems by 84% of the patients; indigenous systems were preferred by those of lower socioeconomic status; the tendency to shift from one source of treatment to another increased with length of illness; the popular image of physicians tended to be governed by the extent to which they exhibited a "natural gift for cure"and not greed; extra-family consultations were common in cases of serious illness; and termination of treatment was generally decided unilaterally by the family without consultation with the physician. It is noted that shifts in treatment did not denote dissatisfaction with a physician but rather an acknowledgment of his limitations. (HC)

2711 Dunn, F.L. *Traditional beliefs and practices affecting medical care in Malaysian Chinese communities.* Medical Journal of Malaya (Singapore), 29(1), Sep 1974, 7-10. Engl.

Traditional Chinese medicine substantially influences life in peninsular Malaysia and Western health workers should be prepared to cooperate with its practitioners. Manifestations of its influence are the popularity of Chinese medicinal teas and other self-medications, the persistence of traditional behaviour during childbirth (even though most deliveries are conducted in the hospital or maternity home), the widespread practice of T'ai Chi Chuan, and the existence of an estimated 1 000 Chinese medical practitioners. Its use is not limited to the Chinese population; non-Chinese constitute 20-25% of the clientele of traditional practitioners and medicinal tea stalls. Since 1950, there has been a gradual shift toward cosmopolitan (Western) medicine for treatment of acute physical diseases and disorders, but patients are likely to consult Western medicine for only

a limited range of disorders and diseases. Further research into the potential for cooperation between traditional and cosmopolitan medicine is recommended. (HC)

2712 Hautvast, J.G., Hautvast-Mertens, M.L. *Analysis of a Bantu medical system: a Nyakyusa case-study (Tanzania).* Tropical and Geographical Medicine (Haarlem), 24(4), Dec 1972, 406-414. Engl. 17 refs.

An examination of the medical system of the Nyakyusa, a Bantu people of Tanzania, can acquaint Western-trained health practitioners with the social and medical aspects of traditional medicine. The Nyakyusa believe that disease is caused by witchcraft – a power to harm exercised by certain individuals who are often family members. An examination of the disease-causing magic must be traced by a medicine man or a diviner, etc., or discovered through autopsy to keep the disease from spreading to the relatives of the afflicted person. Once the source of the witchcraft is identified, the medicine man can prescribe a preventive medicine for the endangered family. Some Nyakyusa medical concepts have a Western equivalent (e.g., allergy, roundworm, syphilis, malaria, etc.) while others, such as the sharp pain which is the result of a witch having introduced a foreign body into a person, do not. A number of concepts of both types are set down and a diagnostic consultation with a diviner is recorded in full. (HC)

2713 Imperato, P.J. *Developing world: traditional medical practitioners among the Bambara of Mali and their role in the modern health care delivery system.* Tropical and Geographical Medicine (Haarlem), 27(2), Jun 1975, 211-221. Engl. 14 refs.

A study of the traditional medical practitioners among the Bambara of Mali was undertaken to determine their potential role in the modern health services. Interviews were conducted in 128 villages over an 8-year period; patients, traditional practitioners, and modern health workers were asked how they felt toward traditional and modern practices. The range of traditional practitioners included herbalists, fortune tellers, masters of amulets, magicians, and marabouts (practitioners who treat disease by means of Koranic charms). Results indicated that 78% of the physicians, 95% of the male nurses, 94% of the medical aides, and 100% of the midwives were willing to cooperate with the herbalists; however, none of the physicians, only one-fifth of the male nurses, and one-half of the medical aides recommended cooperation with the other practitioners. The midwives recommended cooperation with marabouts and herbalists only. Herbalists expressed a high degree of willingness to cooperate with all modern health workers, but the other traditional practitioners were only willing to cooperate with midwives. It is suggested that potential for cooperation between herbalists and modern medical workers exists and that traditional herbal preparations should be chemically analyzed. (HC)

2714 Kerharo, J. *Que sait-on des "especes medicinales" vendues par les herboristes sur les marches senegalais? (What do we know about the "medicinal plants" sold by herbalists in Senegalese markets?).* Medecine d'Afrique Noire (Paris), 23(11), Nov 1976, 666-678. Fren.

A study was undertaken to determine the botanical identity, properties, and local uses of medicinal herbs sold in Senegalese markets. The investigator persuaded *borom garaps* (herb vendors) to reveal their sources for 75 different plants, which are presented alphabetically according to their scientific names. Information includes parts of the plant that are used (leaves, roots, etc.), their applications according to the vendors, their principal active constituents, investigations, and their demonstrated therapeutic uses. Alphabetical listings of the plants' common and vernacular names are appended. (HC)

2715 Lasagna, L. *Herbal pharmacology and medical therapy in the People's Republic of China.* Annals of Internal Medicine (Philadelphia), 83(6), Dec 1975, 887-893. Engl.

One of 12 American medical specialists who visited the People's Republic of China in 1974 recounts his impressions of herbal pharmacology and medicine. He comments that evaluating herbal drugs is difficult because they are exceedingly complex – for example, one decoction of eight plants could contain hundreds of different chemicals that may not be in the same proportions from day to day and that may not be prepared in precisely the same manner. Records and controls are not maintained and the Chinese do not feel the need for extensive laboratory testing if a remedy appears to have beneficial effects. Although the author discovered few chemicals or plants that merited Western attention, he was favourably impressed with acupuncture analgesia; Chinese orthopaedic practices; nonoperative approaches to kidney stones, appendicitis, and perforated peptic ulcer; cataract surgery; burn treatment; vascular surgery; and the respect shown for the opinions, experience, and feelings of both patients and physicians. His experiences are briefly described. (HC)

2716 Martin, J.F. *Health and society in Amazonian Peru.* Tropical Doctor (London), 5(2), Apr 1975, 84-88. Engl.

During the author's work in a jungle hospital in the Amazon, he observed that the inadequacies of the health services available to the Indians and *mestizos* of Peru were less due to technological and manpower deficiencies than to social and economic factors. The *mestizos* do not use the services because of their ignorance of the value and availability of health services, the sociocultural differences between them and the providers, the poor quality and prohibitive cost of services, etc. Often when they seek care, these factors combine to render the services received ineffective. The author concludes that poverty is the main determinant of health needs in Peru and other developing countries and that a reorganization of the health system is needed to give

priority to preventive medicine, health education, and the training of paramedical personnel. (HC)

2717 Petard, J. South Pacific Commission, Noumea. *Raau Tahiti: the use of Polynesian medicinal plants in Tahitian medicine.* Noumea, New Caledonia, South Pacific Commission, Technical Paper No.167, Nov 1972. 66p. Engl.

This book sets forth common Tahitian remedies derived from indigenous plants. Although their use recently has been limited to the treatment of minor afflictions and dreaded diseases that cannot be diagnosed with certainty, remedies for hepatic deficiency, uterine haemorrhage, gonorrhea, etc. are included. The remedies were collected through interviews with healers and their patients and from notebooks made available by several old families in Tahiti. It is hoped that scientific scrutiny of these empirical remedies – many of which are used throughout Polynesia and the Pacific – will eventually sift out the scientific knowledge from the folklore. (HC)

2718 Roy, A.K., Bose, S.K. *Qualitative analysis of curative medical service and its utilisation in a rural area: a preliminary study.* Alumni Association Bulletin (New York), 9, Dec 1960, 34-41. Engl.

A study was undertaken in Nasibpur Union, India, to determine the population's access to and use of health services. A house-to-house survey was conducted and detailed information gathered on available health services and manpower. The resulting data indicated a direct correlation between health centre utilization and distance from the facility. Sicknesses were treated by local nonqualified or traditional practitioners and the people preferred, respectively, persons not qualified but practicing modern medicine (including dais), qualified allopaths, unani and folk practitioners, homeopaths, and ayurvedic practitioners. Villagers did not distinguish between qualified and unqualified practitioners but judged practitioners by the confidence they inspired. It is concluded that traditional practitioners have considerable influence on the populace and, thus, their confidence and involvement in health programmes should be sought. (HC)

2719 Thomas, A.E. *Community adaptation to health services in the Machakos District of Kenya: a preliminary report.* Nairobi, Institute for Development Studies, University College, Staff Paper No.36, Jun 1969. 15p. Engl.
Unpublished document.

A survey of health beliefs and behaviour was carried out in two Kenyan market communities, one of which had access to a health centre (Masii) and the other a dispensary (Mbiuni). The health centre served a wider geographical area, had a longer history, and had a better maternal and child health service than did the dispensary. For 4 months in 1969, investigators interviewed and examined individuals in a total 53 households. Their findings revealed that the health centre was more widely used than was the dispensary, but mothers using both facilities had similar knowledge and attitudes regarding prenatal care, delivery care, nutrition, vaccination, family planning, etc. Other findings – tabulated in the appendix – are inconclusive but are interesting as baseline data on rural health-related knowledge and beliefs. (HC)

2720 USA, Department of Health, Education, and Welfare. Kleinman, A. Kunstadter, P. Alexander, E.R. Gale, J.L., ed(s). *Medicine in Chinese cultures: comparative studies of health care in Chinese and other societies.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(NIH) 75-653, 1975. 803p. Engl.

The papers delivered at a conference on comparative study of traditional and modern medicine in Chinese societies have been compiled in this publication. They reflect the aim of the conference organizers to review: medicine and health care in Chinese culture; comparative cross-cultural approaches to medicine, psychiatry, and public health in different societies; and cross-disciplinary research and teaching ventures. They include reports of field studies, but none from the People's Republic of China. The papers have been divided into five sections – medical systems in Chinese societies, medical systems on the periphery of China, demographic and epidemiological aspects, implications for future research, and implications for health care. An index is included. (AC)

2721 Woods, C.M., Graves, T.D.Wilbert, J., ed(s). *Process of medical change in a highland Guatemalan town.* Los Angeles, Cal., Latin American Center, University of California, Latin American Studies Vol.21, 1973. 61p. Engl. 22 refs.

In this study, the authors attempt to locate, describe, and explain changes in medical practice and belief in San Lucas Toliman, Guatemala. The town's inhabitants, who comprised 3 214 Indians and 761 Ladinos of Spanish-European descent, patronized three competing systems of medicine: traditional Indian, traditional Ladino, and Western whose practitioners were, respectively, the shaman and midwife, pharmacist and spiritualist, and the doctor, nurse, and nun. The authors note that gradually the Western system had become more widely utilized than the others. The reasons for this change are discussed, forming the basis for a hypothetical model of the change process. The authors theorize that the success of modern medicine is due to its demonstration of falseness in traditional beliefs about the causes of health and illness. Statistical data are included. (RMB)

V.7 Epidemiological, Family Planning, MCH, and Nutritional Studies

See also: 2190, 2297, 2314, 2331, 2353, 2361, 2369, 2396, 2404, 2405, 2410, 2537, 2538, 2539, 2540, 2542, 2544, 2547, 2548,2550, 2551, 2552, 2553, 2556, 2557,

2559, 2561, 2651, 2671, 2673, 2678, 2679, 2680, 2684, 2692, 2697, 2719

2722 Ahmad, S.H., Bhargava, S.K., Ramanujacharyulu, C., Hooja, V., Ghosh, S., Moriyama, I.M. *Maternal health, child health, and family planning: a plea for integrated approach.* Indian Pediatrics (Calcutta), 10(11), Nov 1973, 637-645. Engl. 10 refs.

A study of the demographic characteristics of 25 335 "ever married" women was undertaken in south Delhi, India, to determine the influence of factors such as income, maternal age and education, total number of pregnancies, foetal and sibling deaths, and number of living children on acceptance of contraception. The population resided in contiguous localities and represented all existing socioeconomic groups in Delhi. Of the total population, 16 130 were not pregnant and this group provided the base for analysis of motivational factors. Data were gathered in house-to-house interviews over 2 1/2 years and subjected to computer manipulation. Findings included the following: 60% of women did not practice family planning; users increased with age up to 35 years; at all ages, the condom was the device of choice; in 7.9% (mostly low income) one of the marriage partners had been sterilized; educational level was directly related to acceptance of family planning (15.4% acceptors among illiterates and 41.6% among college graduates); and sibling deaths deterred acceptance of family planning. These results would seem to indicate that "a scheme for comprehensive maternal and child health care of which family planning is made an integral part should replace the present emphasis on promotion of family planning in isolation." Eight tables of statistical data are included. (HC)

2723 Ampofo, D.A., Nicholas, D.D., Ofosu-Amaah, S., Blumenfeld, S., Neumann, A.K. *Danfa family planning program in rural Ghana.* Studies in Family Planning (New York), 7(10), Oct 1976, 266-274. Engl. 15 refs.

In the first 2 1/2 years of operation, the Danfa Rural Health and Family Planning Project (Ghana) has demonstrated that health education and accessibility are the two most important influences in the acceptance of family planning as a health measure. The project, which has been charged with keeping costs and resources within the country's means, covers four geographical areas with a total 60 000 people and supplements each area's government centre. The research design is such that Area I receives comprehensive services, Area II receives health education and family planning services, Area III receives family planning services only, and Area IV acts as a control. One mobile family planning team comprising a family planning nurse, a family planning assistant, a clerk, and a driver, serves areas I-III. Thus far, there have been twice as many women acceptors in Area I than in the other areas, but the numbers of accepting men in Area II have almost made up the difference. These results indicate that the availability of comprehensive health services markedly increases the number of women acceptors but does not encourage greater acceptance overall than does a combination of family planning and health education. Acceptance rates in all areas of the study have been higher than expected and the investigators believe that this is due to the Ghanaians' recognition of birth spacing as a means to child health. (AC)

2724 Arfaa, F., Sahba, G.H., Farahmandian, I., Jalali, H. *Evaluation of the effect of different methods of control of soil-transmitted helminths in Khuzestan, Southwest Iran.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(2), Mar 1977, 230-233. Engl.

The following methods for controlling helminths were tested in 15 rural villages in Iran: sanitation (pure water supply and one latrine per family), mass treatment (piperazine and bephenium hydroxynaphthoate administered alternately every 3 months), and a combination of both. Stool samples from 80% of the population were examined; each method was implemented in four villages, and the last three villages – one of which was moved to a new location 7 months before the end of the study – were maintained as a control group. Four years later, a second stool examination revealed that infection rates for ascariasis, hookworm, and trichostrongyliasis had dropped by 28%, 4%, and 30% where sanitation measures alone were implemented; by 84%, 73%, and 31% where mass treatment was undertaken; by 79%, 69%, and 30% where both were applied; by 76%, 21%, and 38% in the newly constructed village; and by 19%, 11%, and 31% in the control villages. The study shows that the prevalence of most soil-transmitted helminths can be reduced by mass treatment. The effectiveness of sanitary facilities, however, is limited by the population's ability to use them correctly – in two villages, improper maintenance of courtyard latrines actually augmented the source of infection. Other habits, such as hand moulding animal dung for fuel, also limit the effectiveness of sanitary measures. (HC)

2725 Arfaa, F. WHO, Brazzaville. *Studies on schistosomiasis in Saudi Arabia.* Brazzaville, WHO, 1976. 6p. Engl.

During a survey of schistosomiasis in Saudi Arabia, 1 091 urine and 1 171 stool samples from the inhabitants of various areas (mostly rural) were examined and about 100 sources of water in 46 villages were searched for snails. Findings indicated that both urinary and intestinal schistosomiasis was present in most parts of the country and that snails susceptible to schistosoma existed in virtually all the sources of water, although high density of snails did not necessarily mean high infection rates. Water sources were wells, small canals, cisterns, etc., that provide a mode of transmission called oasis transmission. Because the sources are small, they can be simply and effectively controlled by destroying the snails. The role of baboons in transmitting the disease in some areas is considered. (HC)

2726 **Arhammar, G.** Chilalo Agricultural Development Unit, Addis Ababa. *Assessment of status of health in an Ethiopian rural community (experience of two years' public health work in Chilalo Awraja, Arussi).* Addis Ababa, Chilalo Agricultural Development Unit, CADU Publication No.69, May 1970. 1v.(various pagings). Engl.
See also entries 2693, 2727, and 2728.

The questionnaires and checklists that have been used by the Chilalo Agricultural Development Unit (Ethiopia) are discussed and their limitations and advantages examined. The questionnaire for census-taking, which was obtained from the Central Statistical Office, proved simple to use, providing useful information on vital statistics, educational levels, and marital status and less valuable data on finances. The form used in the sanitation survey contained both essential and nonessential questions. The most important questions were about water sources and availability of latrines and garbage disposal pits. Less interesting was whether roofs were corrugated, walls white-washed, etc. The questionnaires to determine knowledge, attitudes, and practices were deemed suitable, but questions about personal hygiene and cultural eating habits, such as fasting, seemed too intimate for outsiders to ask. Forms for the food survey supplied usable data and the questions were straightforward and simple. The health examination form, which was obtained from the Ethiopian Nutrition Institute, proved extremely useful. The questionnaires are appended. (AC)

2727 **Arhammar, G.** Chilalo Agricultural Development Unit, Addis Ababa. *Report of a combined food and health survey in Yeloma farming district.* Addis Ababa, Chilalo Agricultural Development Unit, CADU Publication No.41, n.d. 1v.(various pagings). Engl.
See also entries 2693, 2726, and 2728.

The results of a 1968-1969 survey into the health and nutritional status of children under 5 in Yeloma district, Ethiopia, indicated that breast-feeding was almost universally practiced but that almost 60% of the children were below the 90% Harvard standard of weight-for-age. The study population was a sample of 57 of the estimated 121 children from the surrounding area. They came from 40 households that had been visited a week prior to the arrival of the team of investigators. The team included a physician, a community nurse, a sanitarian, a dresser, and two clerical workers. They interviewed the members of the households, conducted physical examinations of the children, and provided them with curative care and immunizations against smallpox and tuberculosis. Study findings were that 57.9% of the children under 3 were being breast-fed at the time and 75% of the others had been nursed for 1 year or more, that cow's milk was introduced early, that meat was a rare delicacy and eggs were never eaten, that cow's milk intake rarely exceeded one bottle a day, that at best bottles were cleaned once a day, and that most of the families did not boil the milk. Recommendations arising from the survey centred on a health education campaign to encourage larger servings of milk and earlier introduction of solid foods and to discourage the practices of diluting the cow's milk and feeding butter to newborns. Statistical data are tabulated and forms for data recording are appended. (AC)

2728 **Arhammar, G., Eksmyr, R.** Chilalo Agricultural Development Unit, Addis Ababa. *Health survey in Sagure village and Yeloma farming district, April 1968.* Addis Ababa, Chilalo Agricultural Development Unit, CADU Publication No.68, n.d. 1v.(various pagings). Engl.
See also entries 2693, 2726, and 2727.

An investigation of the health status of children and adults in Sagure village and Yeloma district, Ethiopia, was undertaken in 1968 to form a baseline for evaluation of a health project. The objective of the survey was to examine all the children under 5, all schoolchildren, and a sample of adults. Two months before the survey, a census had identified 336 children in the area and these were asked to attend the examination sessions along with every fourth adult (187) between ages 20 and 39. In all, 196 children and 96 adults participated and 325 schoolchildren were also examined. Identification data, anthropometric scores, erythrocyte sedimentation rate, and values of haemoglobin, haemotocrit, total protein, and amino acid were obtained. The results were codified. They indicated that only a small portion of the under-fives population suffered from severe malnutrition and that 50-60% may have been mildly malnourished. The nutritional status of both children and adults was above that recorded in other surveys across the country. Statistical data are presented and the four appendices comprise the health survey form, the code-key for the children's nutrition examination form, a description of food stuffs, and a list of Chilalo Agricultural Development Unit publications. (AC)

2729 **Arya, O.P., Ongom, V.L., Tomusange, E.T.** *Role of the rural health centre in the control of venereal disease in Uganda.* East African Medical Journal (Nairobi), 51(1), Jan 1974, 109-121. Engl. 15 refs.

Recognizing the epidemic proportions of venereal diseases in Uganda, the authors examine the role of the rural health centre in controlling gonorrhea and syphilis. Their focus is a health centre serving 12 000 people in a rural area near Kampala, where a medical assistant diagnosed and treated venereal diseases and traced contacts where possible through persuasion, notices, and home visits. During the 12-month study (February 1972 to February 1973), the assistant, who had received 6 months special training, treated 183 men and 75 women for gonorrhea, syphilis, or a combination of the two. Most of these people contracted the disease from outside the centre's area or from bar girls, casual acquaintances, or lovers. Many could not be traced or refused to accept treatment. The number of cases and the resistance to contact identification indicated two steps are needed to control the disease. First, every health centre should undertake diagnosis, treatment,

and follow-up of venereal diseases and family planning clinics should routinely screen patients for VD. Secondly, mass health education programmes aimed at medical workers, teachers, and students should be launched to replace the superstitions and ignorance surrounding the causes and cures of the diseases. Like other communicable diseases, venereal disease can be tackled and prevented with a combination of medicine and education on both the local and national levels. These two steps would ensure more cases were identified and many congenital diseases prevented. (ES)

2730 Bai, K.I., Ratna Malika, D.P. *School health service programme: a comprehensive study of school children of Tirupati, Andhra Pradesh.* Indian Pediatrics (Calcutta), 13(10), Oct 1976, 751-758. Engl.

During the first year of operation, the school health services in Tirupati, India, sponsored a study of 5 900 children, aged 5 to 14, who were attending 18 primary schools in the town. Students were medically examined and their immunization status recorded. Results indicated that nutritional deficiencies (found in 38% of students) were the most prevalent problem, followed by upper respiratory tract infections, parasitism (30.6%), and dental caries (10.3%). A small percentage of students had not received primary smallpox vaccination and half had not been revaccinated, 47% had not been given BCG, and a full 80% had not received DPT immunizations or protection against poliomyclitis. Based on these findings, it is recommended that the school health services field a team of doctors, social workers, health educators, etc., to undertake preventive and curative measures. (AC)

2731 Bantje, H. *Interpretation of growth curves of under-five children.* AFYA (Nairobi), 2, Mar-Apr 1977, 34-44. Engl.

Recently, the Road-to-Health chart has gained so much respect in Africa that health workers and parents view it as a guarantee for a child's health rather than as a tool for monitoring a child's development. Although it is an excellent tool, its use must be coupled with informed advice and suitable follow-up. Health workers must employ it properly, ensuring they have marked age, height, and weight correctly and noted weight gain or loss. They should be aware of critical periods – for instance, when a child is being weaned or just beginning to eat adult foods. If they detect failure to gain weight, they should ask questions and advise mothers realistically. They may find that a young child has just begun to compete with older children for his share of the family meal and in this case they should suggest that the child be given his food separately or that he be allowed to eat with his mother. (AC)

2732 Biran, N., Abu-Gosh, S. Israel, Ministry of Health. *Emdot, yeda vehitnahagut shel toshawe Yehuda veHashomron legabeh nosei briut vesanitatzia behlal vemahalot haholera befrat. (Attitudes, knowledge, and behaviour of inhabitants of Judea and Samaria towards health and sanitation in general and cholera in particular).* Jerusalem, Institute for Applied Social Research, 7 Jul 1971. 70p. Hebrew.

After the outbreak of cholera in the summer of 1970 in Judea and Samaria, the Israel Health Education Unit of the Ministry of Health requested a study in these areas concerning health and sanitation in general and cholera in particular. Interviewers contacted 1 060 persons – 299 from three towns, 562 from six villages, and 199 from refugee-camps. They sought information on the population's behaviour patterns in illnesses, cleanliness, food handling, and food cultivation. Findings showed that the population would readily resort to medical services for illness treatment but that more than a 10th had never heard of cholera nor could they recognize its symptoms. Cleanliness standards were relatively high, except in food handling, and the population indicated appreciable interest in improving sanitary conditions. Sanitary facilities existed in about 75% of urban homes and about 20% of village and refugee-camp dwellings. Nearly 25% of the study population were not aware of the dangers inherent in using human waste in agricultural production. Food storage was on the whole satisfactory. Recommendations for expanding health services and health education are included in the report. (EE)

2733 Blumenthal, D.S., Schultz, M.G. *Effects of ascaris infection on nutritional status in children.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 25(5), Sep 1976, 682-690. Engl. 29 refs.

To determine the effects of ascariasis on the nutritional status of children, a study conducted in 1976 sampled 193 children, aged 2-10, served by a medical clinic in a rural area of the southern United States. Stool specimens collected from each child revealed 30 infected children, who were matched in age, race, sex, and family income with 30 uninfected controls, all the offspring of seasonal farm workers. From socioeconomic questionnaires, examinations of diet, anthropometric measurements, physical examinations, and laboratory tests, comparative data, collected in tables, indicate the effects of living conditions on the incidence of infection and the result of the infection on the health of the child. Statistically significant evidence of an adverse effect of ascariasis on serum albumin levels and plasma vitamin C levels was found, but no child had inadequate levels of these nutrients. Suggestive evidence of an adverse effect of the infection on weight for height and on riboflavin was also found. There were no significant differences between infected and control children with respect to seven other laboratory measurements. (ES)

2734 Bolton, J.M., Snelling, M.R. *Review of tuberculosis among the Orang Asli (Aborigines) in West Malaysia from 1951-1970.* Medical Journal of Malaysia (Singapore), 30(1), Sep 1975, 10-29. Engl.

Tuberculosis detection among the Orang Asli – aboriginal inhabitants of the sparsely populated jungles of West Malaysia – began in 1961 and has extended to the 1970s. The first campaign utilized mobile X-ray equipment, which was flown by helicopter to the area's 120 medical stations; all inhabitants within 2 miles of each station underwent X-ray investigation and their films were sent to Kuala Lumpur for interpretation. Persons with abnormal roentgenograms were called into a hospital in Gondar for examination and treatment. By 1965, more than half the Orang Asli over age 9 had participated in the mass campaign and an additional 18-30% underwent X-ray screening yearly until it was discontinued in 1969. From that time, examination has been limited to persons with symptoms (cough of longer than 2 weeks duration) and immunizations have been given to all newborns, people under 25 not exhibiting a BCG vaccination scar, and all patients responding negatively to the Mantoux test. Since the introduction of the first mass campaign, the numbers of new cases of tuberculosis have decreased from 2% to 0.5% of the total population. The course of treatment, the cost of the campaign, and some problems encountered during its implementation are discussed; relevant data are presented in 12 tables and 3 graphs. (HC)

2735 Borgatta, E.F. *Research problems in evaluation of health service demonstrations.* Milbank Memorial Fund Quarterly (New York), 44(4), Oct 1966, 182-201. Engl.

Because health services are influenced by custom, staff attitudes, community receptivity, and other intangibles, straightforward evaluation is difficult. Objective evaluation can be impeded by rationalizations, such as the idea that the effects are too general, small, subtle, or long-range to be measured, etc. Another problem is that programmes often lack control groups and basic experimental designs (population selection, outcome measures, etc.) vary widely. There is frequently a conflict between the goals of the programmers and the people they are supposed to serve or between different social classes within the target population; the result is that the same programme can inspire both positive and negative reactions. Given the effects of all these forces, planners have recently moved away from direct evaluation unless the programme itself is designed as an experimental procedure. (RMB)

2736 Buck, A.A., Anderson, R.I., Sasaki, T.T., Kawata, K. *Health and disease in Chad: epidemiology, culture, and environment in five villages.* Baltimore, Johns Hopkins Press, 1970. 284p. Engl.

After designing and testing methods for assessing a population's health status, the authors visited Republic of Chad officials, conducted an extensive pilot study, and prepared a mobile epidemiologic team to investigate disease occurrences, frequency, and causes. The team comprised a physician-epidemiologist, an ophthalmologist, a laboratory scientist, a senior laboratory technician, a social anthropologist, a sanitary engineer, an entomologist, and four nurses; the group visited five villages that were representative of the country's major subareas. Through observation, interviews, and immunologic testing, they compiled statistical data on geography, environment, culture; prevalent pests; and health problems of each village. Statistical data are set forth and the materials and methods used in the study are elaborated. (HC)

2737 Campos, F. Pan American Health Organization, Washington, D.C. WHO, Geneva. *Rural sanitation.* In Research in Progress 1976, Washington, D.C., Pan American Health Organization, Department of Research Development and Coordination, 1976, 337-339. Engl.
For complete document see entry 2776.

An investigation of sanitary conditions in a rural area is under way in the Maria Linda river basin, Guatemala. The investigation will consist of analyzing available information on the river basin and studying the consequences of using sewage for irrigation in Chichicastenango. Other plans are to select sampling station sites for use in researching the irrigation and/or water supply and excreta disposal systems. The project began in 1974 and is to be completed in 1977. (HC)

2738 Cardozo, L.J. *Paediatric survey at a district hospital in Uganda.* Tropical and Geographical Medicine (Haarlem), 25(1), Mar 1973, 59-64. Engl. 9 refs.

A review of 1 year's pediatric admissions to the Mbarara District Hospital, Uganda, revealed that 90% of all admissions were due to infectious diseases, in particular, bronchopneumonia, measles, and gastroenteritis; that 57% of all deaths occurred during the first 24 hours of hospitalization; and that 8% of the patients were discharged without medical consent. The tendency of parents to remove their children from hospital without permission seemed to increase with length of stay. To combat this trend, it is suggested that mothers be given health education, especially in cases of malnutrition, while in the wards; that staff show more interest in long-term cases during ward rounds; and that seriously ill children be treated out of sight of mothers or other children. Causes of admission and mortality, age in relation to death, death in relation to time after admission, and discharges without medical consent (per disease and per length of stay) are tabulated and findings compared to those of other African research. (HC)

2739 Chang, W.P., Ayele, T.M. *Summarized report on peripheral health workers.* Gondar, Ethiopia, Department of Preventive Medicine and Public Health, Haile Selassie I Public Health College and Training Center, Dec 1972. 7p. Engl.
Unpublished document.

A project to train auxiliary health workers for deployment in rural Ethiopia was undertaken in 1962. Six Amharic-literate villagers were trained for 6 months at a health centre and received 6 months supervised fieldwork before returning to their villages with a mandate to improve sanitation, provide health education, report and assist in the control of communicable diseases, and

collect vital statistics. Other duties included undertaking first aid, assisting upper level health workers, and reporting monthly on their activities. The auxiliaries were visited weekly by a health officer, community nurse, and sanitation intern who offered guidance and supervision. Preliminary evaluation of the project showed that the workers were well accepted by their communities. Progress was noted in latrine construction, garbage disposal, and vital statistics collection. However, greater progress in preventive health was made in areas where there was no health station. It seemed that villagers who had access to a health station expected more curative care. The project, though promising, was abandoned for lack of funds. (HC)

2740 **Colombia, Ministerio de Salud Publica.** *Informe sobre el desarrollo de los programas del sector salud. (Report on the development of health sector programmes).* Bogota, Ministerio de Salud Publica, Document No.DNP-1.091-URH-DSSS, 1973. 1v.(various pagings). Span.

This 1973 report reviews the progress of Colombian health programmes in planning, administration, training, maternal child health, environmental sanitation, research, etc., and evaluates the use of the funds allocated to each programme during the year. It consists of three parts: finances available, distribution among the different health programmes, and goals achieved by each programme during the previous 6 months. The scheduling and evaluation of each programme have been broken down into four stages: design and incorporation of an operational model, field work, elaboration of proposals for national implementation, and national implementation. Progress is calculated as the percentage achievement toward projected goals. For example, the first stage of all the programmes was completed as planned (100% achievement), but only 12% of the field work was completed, indicating little progress and possibly a need for procedural changes. Statistical data of results achieved so far, such as hospitals built, vaccinations given, home visits paid, projects undertaken, health personnel enrolled and graduated, etc., are compared to project goals and evaluated. (RMB)

2741 **Cunningham, N.** *Evaluation of an auxiliary based child health service in rural Nigeria.* Journal of the Society of Health Nigeria (Lagos), 3(3), Jan 1969, 21-25. Engl. 10 refs.

This study was undertaken to measure the impact of a maternal child health clinic on the population in Imesi-Ile, Nigeria. All children under 5 in the village were weighed and measured and their health status compared with that of under-fives in a control village. In both villages, selected children were given additional tests and parents were interviewed about their attitudes toward childhood diseases, nutrition, and family size. Findings indicated significant health advantages in Imesi-Ile: infants aged 6 months and over weighed more; the malaria parasite infection rate was low (15.5% compared to 55%); child mortality was less than half that in the control village; and Imesi-Ile mothers wanted fewer additional children (an average 4.1 compared to 8.8). It is concluded that the Imesi-Ile clinic, which is staffed by two nurses and six midwives, has significantly improved child health at reasonable cost and that the deployment of state certified midwives in such clinics is a valuable contribution to health services. (HC)

2742 **Datta, S.P., Srinivasa, D.K., Kale, R.V., Rangaswamy, R.** *Evaluation of health centre (vulnerable villages).* Indian Journal of Preventive and Social Medicine (Varanasi, India), 2, Dec 1970, 45-48. Engl.

Population statistics of 10 villages in Pondicherry, India, were compared for the years 1967 and 1970; they showed an overall decrease in mortality but increases in deaths for children under 14 and overall fertility. Crude birthrate rose from 33 to 34 per 1 000, overall fertility rose from 143 to 151 per 1 000, overall standardized death rate fell from 17 to 15 per 1 000, under-five mortality increased from 20 to 29 per 1 000, 5-14 mortality increased from 2 to 4 per 1 000, and maternal mortality declined from 7 to 3 per 1 000 live births. An analysis of inter-village variation revealed that three villages needed maternal child health and family planning services and two more, situated more than 4 miles from the health centre, needed all basic services. Administrative reorganization is called for. (HC)

2743 **de Ermdneger, O.** *Estudio sobre la relacion existente entre el rendimiento academico y la habilidad general y ajuste de personalidad en un grupo de estudiantes de la carrera de tecnico en salud rural. (Study of the relationship between academic standing, general ability, and personality adjustment in a group of student rural health technicians).* Quirigua, Guatemala, Instituto de Adiestramiento de Personal en Salud, 1975. 1v.(various pagings). Span. 8 refs.

To establish criteria for future student selection, this study examines the relationship between general ability and personality adjustment of 216 student rural health technicians at the Institute of Health Personnel Training (Quirigua, Guatemala) with regard to their academic standing at the end of their training course. The 2-year course, which stresses the technicians' role as rural health promoters, includes 6 months field experience in a village setting. The tests used to evaluate the students and the qualities each test was supposed to measure are discussed. The results are presented as statistical data, which reveal that the higher the student's general ability, the better his personality adjustment, and the better his personality adjustment, the higher his academic standing, although there is no direct correlation between general ability and academic standing. The author concludes that present entrance requirements are adequate for selecting those students who are most likely to succeed, although methods of student evaluation, both before and during the course, should be made more objective, possibly by incorporating more written examinations. (RMB)

2744 **de Mel, B., Aheyaratne, K.** *Diet and health in an isolated agricultural community in the dry zone.* Ceylon Medical Journal (Colombo), 21(1), Mar 1976, 29-38. Engl. 12 refs.

A September 1970 nutritional and clinical survey of a remote, dry zone, agricultural village in Sri Lanka revealed that the major dietary deficiency was protein-calorie malnutrition, especially among mothers and young children. Nutritional analysis of all food consumed over a 2-week period showed that the villagers' diet was also lacking in iron, riboflavin, and vitamin A. In spite of a total lack of sanitary facilities, the incidence of bowel disease was relatively low among the 393 villagers examined by the survey team. The most prevalent infectious illness was infection of the upper respiratory tract. Medical services were not readily available nor much sought after, although traditional medicine was sometimes practiced, and there was a village midwife, whose only qualification was the fact that he had delivered nine children of his own. Despite large families and a total lack of family planning, if not hostility to the concept, family spacing averaged 35 months between births, perhaps due to the custom of breast-feeding each child until the conception of the next. The general standard of health among the villagers was higher than expected, although all showed the small stature typical of the region, which could be a natural adaptation to malnutrition. However, a population distribution of 48% under age 12 raises severe problems for the future, because statistics revealed that the greater the number of children in a family, the lower the family's general levels of health and nutrition – a phenomenon common to agricultural communities where the head-of-household's income does not increase with age, while the number of his children does. Statistical data are included. (Modified author abstract.)

2745 **Diop-Mar, I., Sow, A., Badiane, S.** *Traitement simplifie du tetanos. (Minimal tetanus treatment).* Medecine d'Afrique Noire (Paris), 24(2), Feb 1977, 133-146. Fren. 46 refs.

In this article, the authors discuss minimal procedures for the successful management of tetanus. Hospital treatment includes the cleansing and disinfecting of the wound; the administration of antibiotics, antitetanus serum, sedatives, and muscle relaxants; and feeding intravenously to prevent dehydration. The authors recommend the establishment of intensive care units (ICUs) for tetanus patients, such as the Unites Speciales de Soins aux Tetaniques in Dakar and other African cities, where the staff have been specially trained to deal with respiratory collapse, the most lethal tetanus complication. ICU staff members should be able to insert and maintain tracheotomy and nasogastric tubes – procedures that are described in detail in this article. The authors also discuss the nature, dosages, and relative merits of a variety of drugs that are and have been used in the treatment of tetanus. They note that tetanus mortality in the Dakar intensive care unit, including neonatal tetanus, dropped 22.2% from 1965 to 1974 and have included statistical data for similar units in other areas. (RMB)

2746 **Farrant, M.R., Muller, M.S., Farrant, W., Bennett, F.J.** UNICEF, New York. *Kampala's children.* New York, UNICEF, Apr 1972. 179p. Engl. 51 refs.

This study of children up to age 18, living in selected slums of Kampala, Uganda, details the physical surroundings and economic, social, educational, and residential factors affecting both the children and their parents. Some of the problems are that the children are generally malnourished and prone to infectious diseases and that adolescent males, who lack educational and employment opportunities, congregate in the marketplace and thus are exposed to deviant and criminal influences. Suggested solutions include the creation of a mobile medical team to visit the slums, provision of assistance to an existing boys' hostel, phased development of day care centres, the appointment of community social workers, and schemes for training and employment of uneducated youths. Results of a health survey of 6% of the slum children under age 10, including statistical data on the sample population's age, sex distribution, haemoglobin levels, stool examinations, and prevalence of malaria parasites and protein-calorie malnutrition, are presented. (RMB)

2747 **Finseth, K.A., Finseth, F.** *Health and disease in rural Ethiopia.* Yale Journal of Biology and Medicine (New Haven, Conn.), 48(2), May 1975, 105-114. Engl.

Two American physicians describe the epidemiology of the Soddo region of Ethiopia, where they spent 2 months working in a small mission hospital. Virtually every infectious disease known to man can be found in this area, but intestinal parasites, eye disease, tuberculosis, typhus, leprosy, schistosomiasis, rabies, and venereal disease are endemic. Most patients are weakened by chronic malnutrition and their diet also predisposes them to peptic ulcer. Traditional medicine contributes to the pathology of the region in the form of burns, administered as treatment by medicine men, and *kosso*, a traditional drug that can cause atrophy of the optic nerve, cirrhosis, nephritis, etc. Accidental burns are also a serious problem. The authors stress the mental illnesses and physical injuries deriving from hostility, cruelty, violence, and anxiety, all the result of the high crime rate, exposure to roving bands of thieves and vigilante retaliation, and tribal customs. For example, there is a ritual circumcision of the groom before marriage and he must prove his manhood by bringing back the genitals of another male as a trophy. The Soddo region is also characterized by some common but unusual conditions, such as filarial elephantiasis of the vulva requiring reduction, nasopharyngeal bleeding requiring removal of leeches, and gangrene of the hand and forearm. The authors point out that the best remedy for most of these health problems would be improved public health and sanitation measures and, during their stay, attempted to teach some simple techniques of sanitation and preventive medicine to

local dressers, the most numerous health workers in Ethiopia. (RMB)

2748 **Fox de Cardona, E.** *Malnutrition, mental development, and the use of educational television: some suggested areas of inquiry and research.* Bogota, International Development Research Centre, 1976. 19p. Engl. 12 refs.
First Latin American Forum on Children's Television, Mexico City, Mexico, 24-28 Aug 1976.
Unpublished document.

The author reviews Latin American studies that link nutritional and environmental supplements with mental and physical development in early childhood. She underlines the results of two studies that have compared effects of giving nutritional supplements and mental stimulation to deprived children. Findings were that nutritional supplements alone increased physical development but did not improve mental development. On the other hand, mental stimulation alone had little effect on mental development in deprived children. A combination of the two, however, significantly increased mental and physical development, putting deprived children on a par with those from higher socioeconomic classes – the earlier the intervention, the more positive the results. Mental stimulation in the studies was provided by an auxiliary who regularly visited the children. Other studies that investigated the use of educational television programmes in stimulating mental development in children had less encouraging results. It is suggested, therefore, that educational television programmes should be devoted to involving parents and guardians in providing mental stimulation earlier in a child's developmental process. (AC)

2749 **Gideon, H.** *How much of a hospital's work could be done by paramedical workers?* New Delhi, Coordinating Agency for Health Planning, CAHP No.211, Jun 1973. 6p. Engl.
Unpublished document.

An analysis of the health problems of 1 032 outpatients and 681 inpatients in eight Indian mission hospitals revealed that 48% of the outpatients and 44% of the inpatients would probably not have needed hospital care if they had been treated earlier by a paramedical worker. The author presents this study as proof that hospital services should be reorganized so that highly trained specialists will not have to spend time on cases that could be adequately handled by auxiliaries. Such a reorganization would also lead to a more efficient use of hospital facilities and prevent the patient's loss of income and the disruption of his family life resulting from an unnecessary admission. Statistical data are included. (RMB)

2750 **Gold, E.M.** *Maternal and child health and family planning services: the contemporary global picture.* Mount Sinai Journal of Medicine (New York), 42(4), Jul-Aug 1975, 277-285. Engl. 11 refs.

In the past 25 years, combined maternal child health/family planning programmes have developed through four stages: demonstration and training projects leading to the establishment of networks of maternal and child health centres; the integration of MCH services into the general health care delivery system; the education of pediatricians, pediatric nurses, and auxiliary midwives; and a shifting of emphasis to the quality of life of the individual and the family, including the recognition of family planning and nutrition as preventive health measures. The author discusses the major health problems in maternal child health/family planning, which include high maternal, infant, and childhood mortality; shortages and/or maldistribution of health manpower and facilities; disparity in government allocation of budgetary funds for health; inequality in provision of services; and lack of adequate registration and reporting systems. The core components of integrated MCH/FP programmes aimed at correcting these problems are maternal care, family planning, and nutrition and health education services; the author recommends that governments give more attention to rural areas, to proper utilization of available funds, and to the recruitment and training of indigenous auxiliaries. (RMB)

2751 **Gorbov, V.A., Razumovski, E.S., Chuprakova, V.V.** *Ochistka stochnykh vod sel' skikh nasclennykh mest. (Sewage disposal in populated rural areas).* Gigiena i Sanitariia (Moscow), No.1, Jan 1974, 35-38. Russ.

Special installations have been constructed to decontaminate sewage by means of complete exidation of organic contamination and aerobic stabilization of active sludge. Their output varies from 12 to 700 m^3 a day. They are made in serial production and locally assembled. An illustration and statistical data are included. (Modified journal abstract.)

2752 **Goto, S., Sado, M., Yano, K., Takeuchi, M., Ichikawa, Y., Ogaku, S., Inoki, S., Mukherjee, S.K.** *Survey of infant mortality rates in Sarawak.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 5(3), Sep 1974, 424-429. Engl.

A survey was conducted in a rural area of Sarawak to assess infant mortality and to collect data on the socioeconomic status of the communities. Ninety-nine married women (73 Iban and 26 Malay) in six villages were interviewed regarding their pregnancy history (stillbirths, abortions, live births, etc.) and their family's infant and child mortality. Findings indicated that the mean infant mortality for approximately 30 years had been 75.2 per 1 000 live births, although a downward trend was discernible in the most recent figures. The rate for Ibans was 84.1 per 1 000 live births, whereas the Malay rate was 50.8 per 1 000. The main symptoms (88.3%) preceding child death were vomiting, fever, and diarrhea. Most infant and child mortality can be attributed to the lack of trained midwives, sanitary water supplies, and sufficient nutritional intake. The interview schedule and the statistical data

compiled during the survey are set forth in 10 tables. (HC)

2753 **Gould, G.C., ed(s).** *Health and disease in Africa: the community approach.* Nairobi, East African Literature Bureau, 1971. 372p. Engl.
Seventeenth Annual Scientific Conference of the East African Medical Research Council, Nairobi, Kenya, 1970.
Individual articles have been abstracted separately under entries 2122, 2224, 2352, 2377, 2754, and 2758.

In 1970, the East African Medical Research Council held its 17th annual scientific conference in Nairobi on the community approach to health and disease in Africa. During 24 sessions, foreign and African experts presented papers on a variety of health topics. The sessions concentrated on basic health services, social and cultural aspects, endemic goitre, epidemiological problems, water-borne vectors and diseases, trypanosomiasis and tsetse control, molluscicides, parasitic diseases, malaria control, nematodes, rabies, immunization, family planning, complications of pregnancy, mass diagnosis, Buruli ulcers and tuberculosis, schistosomiasis, leprosy and venereal diseases, health economics, intestinal infections, and social development. The report of the conference includes the opening addresses, the discussions following each session, and either the complete text or an abstract of every paper presented. (RMB)

2754 **Kagia, J.** *Some factors that determine effective application of immunisation programmes.* In Gould, G.C., ed., Health and Disease in Africa: the Community Approach, Nairobi, East African Literature Bureau, 1971, 226-228. Engl.
Seventeenth Annual Scientific Conference of the East African Medical Research Council, Nairobi, Kenya, 1970.
For complete proceedings see entry 2753.

A retrospective study of registration records for a child welfare clinic in Kenya indicated that about half the anticipated numbers of patients actually came to the clinic and only a small percentage of these completed immunization schedules. **The study population was 1 195 under-fives who attended the clinic from January** 1966 to September 1968. This figure was approximately half the number expected by clinic staff for the population size of the clinic's catchment area. Findings from a review of clinics records were that the numbers of female and male children who attended clinic were similar, more than half the children who were registered did not return a second time, and those who returned did so too early for follow-up DPT and polio vaccines. Immunization figures were 15.5% for primary smallpox vaccination, 17.1% for BCG, 16% for DPT, and 24% for polio. Investigators concluded from these findings that research should be undertaken in the villages to determine attitudes toward the services, that clinics should be organized to ensure all children receive care from the same health team, that improved vaccines should be a priority of medical research, and that child welfare clinics should be integrated into basic health services. (AC)

2755 **Kakande, M.L., Bennett, F.J., Rawji, F.** *Selected aspects of the health of old people in rural Buganda.* East African Medical Journal (Nairobi), 49(12), Dec 1972, 970-982. Engl.

This study examines geriatric morbidity in a sample of 117 people over 50 years of age attending a rural health centre in Uganda. Tables illustrate the results of personal interviews, physical examinations, and laboratory tests. Age and living conditions; nutrition and anthropometry; incidence of anaemia, hookworm, parasites, and syphilis; and cardiovascular conditions of the sample population are set forth. Of the 49 men and 68 women studied, nearly one quarter had evidence of heart disease or failure and malnutrition, especially among the men, was common. At present, medical services for the elderly are nonexistent and, with longer life expectancy resulting from improved living conditions and the increased urban migration of the young, improvements in care for the elderly will be necessary. To meet this need, medical assistants in rural health **centres should begin to provide geriatric care by routinely checking the cardiovascular and nutritional status** of their older patients. (ES)

2756 **Karjadi, D., Djokosusanto, I., Soetedjo, S.H., Husaini, J.K., Prawiranegara, D.D.** *Effect of a food supplementation programme on the nutritional status of pre-school children.* Paediatrica Indonesiana (Jakarta), 11(5), Sep-Oct 1971, 16-27. Engl.

A pilot study conducted in the village of Kebon Kelapa (Indonesia) to evaluate the effect of a food supplementation programme revealed a dramatic improvement in the nutritional status of children aged 1-3 and a reduction in the incidence of major diseases, especially respiratory tract infections and diarrhea, among all the children in the study population. All the village children aged 1-6 from the lower socioeconomic levels were examined in a preliminary clinical nutrition survey and 56 were randomly chosen for the study. The mothers of these children received elementary training in nutrition and sanitation during weekly classes at a nutrition clinic. Clinic personnel then carried out a programme of supplementary feeding by distributing supplements of full fat soy flour and local foods. The nutritional status of the children in the study was assessed by a physician using Gomez Classification and a modified Jelliffe technique of anthropometric measurement before, immediately following, and 3 and 7 months after the programme. The children's socioeconomic background, their diet, and details of their nutritional status are discussed and presented as statistical data. Because of the success of this programme, the authors recommend that priority be given to others of its type and stress its universal applicability. (RMB)

2757 **Kim, M.H.** *Approach to promote the rural health care.* Yonsei Medical Journal (Seoul), 15(2), 1974, 58-73. Engl.

A pilot project in nurse-delivered primary health care was undertaken in rural Korea. It comprised a health centre and subcentre offering a variety of preventive and curative services to a target population of 4 121 households. After the facilities had been in operation 2 years, 201 households within the catchment area were surveyed to determine the inhabitants' general characteristics (economic status, education, etc.), the obstetric history of their female members, their utilization of the health centre, and their satisfaction with the available services. The results of the survey revealed that 78.8% of the households were aware of the health service but only 20.5% had availed themselves of it and only 51.5% of the users were satisfied. These findings indicate a reluctance on the part of the populace to accept the service. The results of the survey are presented in 31 tables. (HC)

2758 **Koch, A.** *Critical views on BCG mass vaccination campaigns.* In Gould, G.C., ed., Health and Disease in Africa: the Community Approach, Nairobi, East African Literature Bureau, 1971, 234-242. Engl.
Seventeenth Annual Scientific Conference of the East African Medical Research Council, Nairobi, Kenya, 1970.
For complete proceedings see entry 2753.

Prevention is the only possible solution to the problem of tuberculosis in Tanzania; the author strongly urges that all neonates be vaccinated with BCG. This protection can last for up to 10 years. Mass vaccination campaigns aimed at older children and adults, however, are less effective because by age 7 more than 50% of Tanzanian children have developed a natural immunity to tuberculosis and tuberculosis found in children other than newborns is not the result of primary infection but is due to the breakdown of either natural or artificially induced immunity. The author points out that social development leading to improved hygiene and living standards caused a drastic drop in tuberculosis rates in Europe long before vaccines and modern medicines were available and social development may well prove to be the most effective weapon against tuberculosis in Africa. (RMB)

2759 **Kumar, V., Bhasker, R.** *Model for health monitoring of rural pre-school children.* Indian Pediatrics (Calcutta), 12(9), Sep 1975, 907-913. Engl. 10 refs.

A simple method for evaluating maternal and child health services has been effectively used in the rural village of Ramgarh, India. The village's clinic (auxiliary) personnel were required to gather data concerning immunization, nutritional status, clinic attendance, morbidity and mortality, family planning acceptance, etc., daily from their patients during working hours – 4 hours at the clinic and 3 hours home visiting. Data were recorded on a modified road-to-health card and a simple proforma; after 3 years, clinic staff could see the value of the information they had collected and were able to reorient their efforts based on the findings. For instance, the results showed a seasonal variation in the prevalence of certain diseases. Other findings are presented and discussed. (HC)

2760 **Kusnadi, H.** *Results of the operational trial study of a treatment programme in Stabat (North Sumatra).* Bulletin of the International Union against Tuberculosis (Paris), 49(1), 1974, 101-105. Engl.

The Stabat District Health Centre, Indonesia, which serves a population of 60 000, has achieved outstanding results in its anti-tuberculosis programme. With the other district health centres around the country, it provides free treatment to TB patients, but its approach to the population served has made a positive difference in numbers of patients continuing treatment and being cured. In 1972, heads of the villages, subvillages, and neighbourhood organizations of the district inaugurated the programme and disseminated information about treatment procedures. One week later, attendance at the centre began to rise and by the 12th month, the total number of cases detected had reached 0.8% of the population (0.6% is the national estimate). The first group of patients, whose sputum tests were positive for acid-fast bacilli, started treatment for 1 year and 93 continued for a 2nd year. Sputum tests yielded negative results for 96 of the patients after 1 year of treatment and for all 93 the 2nd year. Success is attributed to the initiative shown by the head of the health centre in solving daily problems related to the programme; a steady supply of drugs from the government; good communication between the health centre, the subdistrict public administration, and key persons in the villages; and the success of volunteers in motivating people to take advantage of the programme and ensuring follow-up. (HC)

2761 **Lee, S.K., Kim, D.H., Jung, J.H., Chung, K.S., Park, S.B., Choy, C.H., Hong, S.H., Rah, J.H.** *Study concerning health needs in rural Korea.* Kyungpook University Medical Journal (Taegu, Korea), 7(1), Oct 1974, 1-66. Korean. 15 refs.
A five-page English abstract is provided.

A sample of 1 438 persons – one-fourth the population served by a rural health centre in Korea – was examined or interviewed to determine their health status and needs. Twenty-nine data tables were compiled. It was observed that health problems were most common in children under 5, least common in 15-19-year-olds, and, in the group over 20, more common among women than men. Other observations were that 87% of the health problems were treated by primary care procedures, the average yearly cost for medical care was 2 800 won, 93% of the water supplies were polluted, 90% of the latrines were unhygienic, vaccination rates were low (23-38%), and rates of pregnancy wastage were high. It is concluded that the prevalent health problems (sanitation, MCH, etc.) could be dealt with by paramedical workers, that 85% of all medical problems could be diagnosed and treated by general practitioners, and that the high costs of medical care should be subsidized by government. (HC)

2762 **Lubis. F.. Borkent-Niehof. A.. Astuti, P.** Family Planning Project, Serpong. Indonesia. *Traditional midwife in Kecamatan Serpong: the* dukun bayi *survey.* Leyden. Netherlands. Leyden State University. Serpong Paper No.5. Jun 1973. 1v.(various pagings). Engl.

The characteristics and activities of the *dukun bayis* (traditional birth attendants) in a rural area of Indonesia were surveyed in June 1973 to form a baseline for the preparation of a midwifery/family planning course. The investigation was carried out by trained interviewers, who first questioned women of child-bearing age and then the *dukuns* themselves. The data are set forth in 21 tables and these observations have been made: most *dukun bayis* are illiterate; most are related to other *dukun bayis* from whom they learned their craft; most are married and middle-aged when they become *dukuns*; their functions include confirming pregnancy, bathing newborns. massaging women after delivery. treating sick children or adults. and. occasionally, giving massages to prevent conception or provoke abortion; most are also engaged in farming; their earnings are usually dependent on the prosperity of their clients: most use a traditional bamboo knife (inadequately cleaned) to cut umbilical cords; most have no knowledge of modern medicine or medical services: and most have scanty knowledge of human physiology and reproduction. Descriptions of a course for *dukuns* implemented on the basis of these findings and further research conducted regarding *dukuns* are included in the appendix. (HC)

2763 **Mathur. Y.C.** *Under five clinic: Institute of Child Health, Hyderabad.* Indian Pediatrics (Calcutta). 12(1), Jan 1975. 127-129. Engl.

Following a socioeconomic and cultural survey of the population around a primary health centre (PHC) in Shankerpally. India, an under-fives' clinic was launched. It was staffed by auxiliaries and local personnel under the supervision of a social pediatrics team from a nearby hospital. The first step was registering the 1 000 children under age 5 who lived within a 3-mile radius and providing their parents with a health card to maintain and bring to the clinic at appointment time. The next step was to institute a standard routine of weighing. nutrition suveillance and supplement. immunization. etc.. through which each child passed. At the end of 3 years. a child health survey was conducted: the results indicated that protein-calorie malnutrition had dropped from first- to fourth-most prevalent disease. immunization coverage had reached 90%. the prevalence of vitamin A deficiency had declined from 33% to 11%. average weight per age had increased. preschool deaths had fallen from 31% to 18% of total deaths, etc. A positive attitude on the part of the community toward the clinic's programmes was also noted. It is concluded that an under-fives' clinic is an essential component of a PHC and is not expensive in the light of the benefits it accrues. (HC)

2764 **May. J.M.** USA. Agency for International Development. Department of State. *Contribution of family planning to health and nutrition.* Washington. D.C.. Office of Population. Agency for International Development. Secretary of State. Nov 1974. 65p. Engl. 195 refs.

Research findings on the nutritional requirements of pregnant and lactating women and the consequences of unfulfilled nutritional needs and frequent pregnancies demonstrate the usefulness of family planning in areas where food resources are scarce. High infant mortality. poor physical and mental development among surviving children. foetal loss and prematurity. and early weaning and infant malnutrition are all associated with maternal health. The daily recommended allowances of nutrients for nonpregnant and pregnant women. the properties and constituents of mature human milk. and average newborn birth weight by geographical location are tabulated. (HC)

2765 **Minde. K.K.** *Psychological problems in Ugandan school children: a controlled evaluation.* Journal of Child Psychology and Psychiatry (London). 16(1). Jan 1975. 49-59. Engl. 20 refs.

A study was undertaken to determine the incidence of psychiatric disorders in Ugandan children. A sample of 577 children in three economically distinct areas – an impoverished rural area. a prosperous rural area. and a lower middle urban area – were rated by their teachers according to a symptom questionnaire originally devised for British children. Children whose behaviour indicated serious psychiatric disturbances were interviewed and physically examined by the author and their parents were interviewed. The findings were that 108 children. or 18%. had psychological problems – the percentage was highest in the city schools (24%) and lowest in the prosperous rural school (10.5%): the majority of parents agreed with the teachers' assessment of their child's behaviour. Of 48 children followed up more intensively and compared with a control group of 36. 19 did not eat in the morning before going to school whereas only 4 of the control group went to school without breakfast: the problem group lived in extended or multi-nuclear families more often. moved more frequently, performed worse academically. and had less realistic expectations than did the control group. It is concluded that psychological difficulties are common in Ugandan schoolchildren. that they are associated with easily identifiable factors in the environment, and that primary schoolteachers and parents can provide reliable estimates of the disturbances by using methods developed primarily for Western societies. (HC)

2766 **Mohan, V.. Singh. H.. Singh. S.** *Epidemiological survey of infant mortality.* Indian Journal of Pediatrics (Calcutta). 41(317). Jun 1974. 224-229. Engl.

To determine the effect of epidemiological factors on infant mortality in India. a group of investigators interviewed a random sample of 6 978 rural and 2 210 urban parents in their homes and asked them about the

occurrence of live births or infant deaths in their families during the calendar year 1971. It was noted that: the overall infant mortality in 1971 was 101.1 per 1 000 live births, the rural rate was 105.1, and the urban 89.5 per 1 000 live births; the neonatal and postneonatal death rates were 44.9 and 56.1 per 1 000 live births respectively; infant mortality was higher among low-income groups than among their wealthier counterparts, among shopkeepers and labourers than among farmers, and among illiterates than among the better-educated; infant mortality was higher where well water was used instead of hand pumped water; and infant mortality was lower in villages with access to health subcentres or MCH services than it was in villages without such services. Eight statistical tables are included. (HC)

2767 **Mokhtari, L., Lameche, Z.** *Integration of BCG vaccination in Algeria: practical problems.* Bulletin of the International Union against Tuberculosis (Paris), 48, Dec 1973, Suppl., 57-67. Engl.

In Algeria, investigators compared official reports of vaccination numbers with vaccine use and discovered a marked discrepancy. The group examined the official notifications received from the country's 15 district health departments and then observed the number of doses of vaccine delivered to each during the first two terms of 1972. The discrepancy prompted supplementary field inquiries in which the children attending nurseries, day care centres, health centres, MCH clinics, etc., in Algiers, Constantine, and the rural Setif region were systematically examined for vaccination scars. The inquiry revealed that notification had been incomplete and that in fact basic public health structures were integrating BCG vaccination into their routine work. A few general suggestions for increasing the degree of coverage are made. (HC)

2768 **Mondot-Bernard, J.M.** *Relationships between fertility, child mortality and nutrition in Africa.* Paris, OECD Development Centre, 1975. 103p. Engl. Refs.

The author, a nutrition expert working for the Organisation for Economic Cooperation and Development, reviews the available literature on fertility, child mortality, and nutrition in Africa. The information is divided into four parts: famine and fertility, fertility and breast-feeding, breast-feeding in Africa, and child mortality and nutrition. Findings of the review are that breast-feeding is still widely accepted in Africa, even in urban areas, but that young literate women usually breast feed for a shorter time than do others. The tendency toward shorter breast-feeding intervals is closely related to higher child mortality (1-5 years) and the link between child mortality and high birthrates is underlined by the study. Conclusions based on this review are that data are scattered and not reliable and that surveys, based on suitable samples and aimed at studying the effect of single variables, are needed throughout Africa. Also, according to the author, systematic record keeping should be urged to determine whether the custom of not feeding a child during illness accounts for the high rates of malnutrition. A bibliography of more than 100 entries is included and statistical data are tabulated. (AC)

2769 **Mura, R., Hollis, M.J.** South Pacific Commission, Noumea. *Dental epidemiology in the South Pacific: Part I. Oral health in New Caledonia, New Hebrides, British Solomon Islands Protectorate, Gilbert and Ellice Islands Colony.* Noumea, New Caledonia, South Pacific Commission, Technical Paper No.168, Part 1, Mar 1974. 62p. Engl.

In this document, the South Pacific Commission has reported results of oral health surveys conducted in New Caledonia, the New Hebrides, the British Solomon Islands Protectorate, and the Gilbert and Ellice Islands Colony. An article on dental caries in French-speaking Melanesia is included, as well as summaries of six previously published papers on dental health in the South Pacific. Most papers contain statistical data. (RMB)

2770 **Nathwani, U.K., Mugenya, A.W.** *Survey of poliomyelitis in Mombasa: 12 year review (1962-73).* Community Health (Bristol, UK), 7(2), Oct 1975, 94-100. Engl. 14 refs.

Poliomyelitis records in Mombasa, Kenya, provide statistics on 215 cases reported from 1962-1973; they show that 94.9% of patients were under 5 years and the worst epidemic occurred in 1973, despite an estimated immunization coverage of 94% of the vulnerable age group. The statistics also suggest that incidence of the disease is increasing and outbreaks peak every 3 years due to the presence of the virulent Type 1 poliomyelitis virus. The reasons for the epidemic of 1973 are not clear; it may have resulted because the vaccination did not "take," the patients already harboured incubating polio, etc. It is suggested that immunization efforts be maintained, that mass immunization campaigns be mounted before expected outbreaks, and that health education aimed at motivating parents to have their children immunized be intensified. (HC)

2771 **Neumann, A.K., Ward, W.B., Pappoe, M.E., Boyd, D.L.** *Education and evaluation in an integrated MCH/FP project in rural Ghana: the Danfa project.* International Journal of Health Education (Geneva), 19(4), Oct-Dec 1976, 233-244. Engl. 23 refs.

In the Danfa project, Ghana, a model for evaluating health education has been fully operating since mid-1973. The project, which boasts large experimental and control populations, is testing the impact of comprehensive health care, health education, family planning, and standard Ministry of Health services. The findings should indicate whether health education warrants its added cost and whether the provision of health education in conjunction with comprehensive health care provides better results than does health education alone or in conjunction with family planning services. Health

professionals and health education assistants are collecting reported and observed changes in behaviour and these data will be compared with previously set objectives. The assistants are village residents who undertake health education, observe its effects, and help identify health education needs and priorities. (HC)

2772 **Newton, N.I.** *Anaesthesia in a developing country. A review of anaesthesia in Lesotho based on a recent survey.* Anaesthesia (London), 31(8), Oct 1976, 1117-1123. Engl.

Fifty physicians, 19 hospitals, and some 100 clinics provide the only medical services available to the entire population of Lesotho. Only one of these physicians is an anaesthetist, who began practicing in 1966 but has been unable, because of his workload, to upgrade anaesthesia services outside his own hospital. All other anaesthesia is handled either by the operating surgeon or by dispensers, specially-trained pharmacists whose skills also include extracting teeth and assisting at postmortem examinations. The principal anaesthesia used by dispensers is ether administered via Schimmelbusch mask. In 1973, the author conducted a survey of anaesthetic apparatus and techniques by sending questionnaires to Lesotho's 16 district hospitals (of which 15 replied) and personally visiting all but the three most inaccessible. The results of the survey indicated that approximately 1 000 major surgical operations are performed annually in the district hospitals, as well as 350 Caesarean sections and 5 000 minor procedures requiring some sort of analgesia; for all this surgery most hospitals are still relying on the Schimmelbusch mask. Even when more modern equipment is available, such as the EMO inhaler, the dispensers have not been trained to use it and Western-educated physicians are unable to perform such relatively simple procedures as spinal blocks. The author suggests that priority be given to training nurse-anaesthetists, an idea that has worked well in other developing countries. (RMB)

2773 **Nhonoli, A.M., Kihama, F.E.** *Health status of a rural population in mid-eastern Tanzania.* East African Medical Journal (Nairobi), 51(1), Jan 1974, 122-130. Engl.

A sample 740 people from a rural population in a mountainous region of Tanzania were selected from nine areas and their sex, age, and regional differentials were recorded. Laboratory tests were run on blood, urine, and stool samples and all underwent physical examination. Although 10 people showed clinical signs of leprosy, no other major disease was discovered. Other findings were that 99% of the children suffered from parasitic diseases and adults demonstrated infection nearly as high (82% in adult men and 71% in adult women). These diseases, coupled with diet, adversely affected haemoglobin levels of both sexes and all ages and diet further affected uric acid and serum cholesterol levels. The regional breakdown indicated that the highest incidence of infectious disease was found in areas near stagnant water. Tables illustrate the data collected. (ES)

2774 **Oduntan, S.O.** WHO, Brazzaville. *Health of Nigerian children of school age (6-15 years).* Brazzaville, WHO, 1975. 120p. Engl.

Thesis submitted for the degree of Doctor of Medicine of the University of London, Jul 1971.

This study assesses the health of Nigerian schoolchildren in terms of their social, economic, and cultural backgrounds. The first part, or "retrospective" study, constitutes an analysis of 17 006 health records from school clinics and dispensaries, a general hospital, and a teaching hospital in Ibadan. The second part, or "prospective" study, involved clinical examination and laboratory and psychometric testing of 1 306 children from a variety of backgrounds, an environmental study of 62 primary and secondary schools, and environmental and sociological surveys of the homes of 293 children. Findings revealed a high frequency of disease among all the students examined except for the upper-class children: 34.5% of the urban and 56.6% of the rural schoolchildren had malaria parasitaemia, 25% of the urban primary schoolchildren were suffering from vesical schistosomiasis, 61-95.7% of the children were harbouring intestinal parasites, angular stomatitis was diagnosed in 34.7% of the urban and 41.5% of the rural schoolchildren, 30% of the children had skin ulcers, etc. Upper-class children were found to score higher on intelligence tests and to be taller and heavier than their peers. It is concluded that the main determinants of health in these schoolchildren are the economic and educational status of the parents, the cultural practices in the home, and the availability of medical services. A number of immediate and long-term proposals for improving the health of Nigerian children of school age are suggested. (HC)

2775 **Overseas Development Council, Washington, D.C.** *Research note: a physical quality of life index (PQLI).* International Development Review (Washington, D.C.), 18(4), 1976, 34-37. Engl.

The Overseas Development Council has designed an index for measuring development – the physical quality of life index (PQLI) – which is markedly superior to GNP. The council rated life expectancy, infant mortality, and literacy figures on indexes of 1 to 100; then it ranked each country according to performance. For example, 75 years life expectancy at birth (Sweden) was ranked 100, and 28 years was ranked as 1; all the countries' life expectancy rates fell between those limits and thus could be assigned a rank. A country's PQLI is the average of its performance in the three categories. A country's income (GNP) often correlates with PQLI but not always, because GNP does not necessarily reflect the well-being of the people. Advantages of the PQLI are that it seems to be a fairly sensitive measure of change over time and can be used to compare progress of groups within large populations. (AC)

2776 **Pan American Health Organization, Washington, D.C. WHO, Geneva.** *Research in progress 1976.* Washington, D.C., Pan American Health Organization, Department of Research Development and Coordination, 1976. 359p. Engl.

Individual articles have been abstracted separately under entries 2159, 2737, and 2782.

One hundred and fifty-one research or research training projects in which the Pan American Health Organization currently participates are summarized. The projects, which range from basic laboratory research to clinical, epidemiologic, and methodologic studies, are grouped under: nutrition and food science, metabolic diseases, dental health, alcohol and drug abuse, endocrinology, genetics, perinatology and fertility, immunology, chronic diseases and cancer, malaria and other parasitic diseases, infectious diseases, multidisciplinary studies, disease surveillance, mycology, mycobacterium infections, foot-and-mouth disease and vesicular stomatitis, zoonoses, health statistics, environmental sciences and engineering, operations research, and biomedical communications. Information for each project includes a statement of the problem, methods, results to date and their significance. Where applicable, publications arising from the projects are included and the grantee, the funding organization, and timetable are set forth. (HC)

2777 **Peru, Ministerio de Salud. Escuela de Salud Publica del Peru.** *Curso para tecnicos en radiologia, 1973. (Course for radiology technicians, 1973).* Lima, Ministerio de Salud, Serie Informativos de Curso, Ano 12, No.2, 1973. 1v.(various pagings). Span.

The Peruvian School of Public Health offers a 5-month radiology course to a maximum of 20 already-practicing X-ray technicians. The admissions requirements, teaching and administrative personnel, and student regulations are listed in this document, as well as a detailed outline of the curriculum, which includes mathematics, physics, chemistry, anatomy, physiology, radiological technology, administration, and radiological techniques for different parts of the body. (RMB)

2778 **Peru, Ministerio de Salud. Escuela de Salud Publica del Peru.** *Normas para la organizacion y desarrollo de cursos de capacitacion para auxiliares de estadistica, 1972. (Criteria for the organization and development of training courses for statistics auxiliaries, 1972).* Lima, Ministerio de Salud, Serie Normas Curso Auxiliares Estadistica, No.2, 1972. 23p. Span.

In 1972, the Peruvian School of Public Health established its final version of the criteria for the intermediate course for statistics auxiliaries. This course, which can be completed in 8 weeks by full-time students or in 13 weeks part-time, trains its graduates to collect vital statistics, organize and maintain medical records, prepare statistical reports and analyses, supervise hospital admissions and outpatient services, and assume various functions within the framework of the Ministry of Health. Information is included on admissions requirements, teaching and administrative personnel, and educational facilities and a detailed curriculum comprises courses on mathematics, public health, administration, international classification of diseases, statistics, and planning. Forms for student registration, attendance, and evaluation are appended. (RMB)

2779 **Peru, Ministerio de Salud. Escuela de Salud Publica del Peru. Unidad Academica de Enfermeria.** *Normas y programa analitico del curso adiestramiento de auxiliares de enfermeria, 1972. (Rules and analytical programme for the training course for nursing auxiliaries, 1972).* Lima, Ministerio de Salud, 1972. 137p. Span.

A maximum of 40 students per year may be eligible to attend the Peruvian School of Public Health's 6-month course for nursing auxiliaries. This document provides information about the course's personnel, setting, admission requirements, teaching methods and evaluation, administration, and a detailed curriculum that includes units on maternal child health, first aid, epidemiology, and basic nursing skills. (RMB)

2780 **Pineo, C.S., Subrahmanyam, D.V.** WHO, Geneva. *Community water supply and excreta disposal situation in the developing countries: a commentary.* Geneva, WHO Offset Publication No.15, 1975. 41p. Engl.

In 1972-1973, the World Health Organization surveyed 91 developing countries to ascertain figures on community water supply and sewage disposal systems. Questionnaires were sent out, seeking information on population with water and sewage disposal as of December 1970; annual increase of persons supplied with such systems; water quality control; planning, construction, and extension of water supplies and excreta disposal; maintenance and operation; reporting procedures; external assistance; use; costs; long-term programmes; training; research and development; and constraints to progress. WHO staff in the developing countries worked with national engineers and policymakers to complete the questionnaires; much of the data was taken from census and annual reports, but much was also based on respondents' subjective judgment. Results of the survey indicated that in the rural areas, where nearly two-thirds of the population reside, an overwhelming majority have no adequate access to safe water or excreta disposal facilities. Half the population that has access to public water supplies in urban areas have only intermittent supplies that are in themselves health hazards due to the infiltration of pollutants when water pressure fails. Findings also suggested that the higher the country's income, the more comprehensive its sanitation coverage; supporting this finding, most countries cited insufficiency of internal financing as the major constraint to progress. Another important constraint was the lack of trained personnel. Statistical data are tabulated. (AC)

2781 **Potts, D.M.** Federation of Family Planning Associations, Kuala Lumpur. *Doctors role: selected articles on family planning and population.* Kuala Lumpur, Federation of Family Planning Associations, 1975. 46p. Engl. 10 refs.

In the first of four articles on family planning, the author examines the role of the physician in contraception and concludes that, while the doctor should demonstrate a commitment to family planning, he should not attempt to implement methods other than those requiring his highly trained skills. The second article explores the role of coitus interruptus in population control throughout history, notes that its acceptance is generally a precursor to the acceptance of other forms of birth control, and recommends it as an uncomplicated, inexpensive, and nonharmful method despite mythical prejudices. The third article deals with male methods of contraception, especially the condom, which should be promoted in male-dominated societies. Finally, the author discusses the relative merits of clinic-based and commercially distributed contraceptive methods and some other approaches to population control, such as China's reliance on the barefoot doctors as contraceptive distributors and its political approval of abortion. All four articles are well-documented. (HC)

2782 **Puffer, R.R.** Pan American Health Organization, Washington, D.C. WHO, Geneva. *Inter-American investigation of mortality in childhood.* In Research in Progress 1976, Washington, D.C., Pan American Health Organization, Department of Research Development and Coordination, 1976, 332-336. Engl. 27 refs.

For complete document see entry 2776.

The deaths of 35 095 infants and children under age 5 in 15 widely separated areas of the Americas were investigated and circumstances surrounding the deaths, such as pregnancy history of the mother, status of infant at birth, infant feeding practices, growth and development, and social and environmental conditions were recorded and compared with similar data for approximately 20 000 living children. Data were gleaned through interviews conducted in the home, the clinic, and the hospital. Researchers found that nutritional deficiency is the most serious health problem in infants and young children and, when coupled with low birth weight, it endangers survival and hampers growth and development; that the incidence of low birth weight is higher in Latin America than in the United States or Europe; that neonatal deaths tend to be underreported in Latin America (56% of neonatal deaths in large maternity wards of six hospitals were not included in official statistics records); postnatal deaths correlated inversely with the existence of piped water in the home; and that three important determinants of infant mortality are birth weight, birth order, and maternal age. Publications that resulted from the investigation are listed. (HC)

2783 **Rao, B.S.** *Low cost waste treatment method for the disposal of distillery waste (spent wash).* Water Research (Oxford), 6, 1972, 1275-1282. Engl. 9 refs.

A study undertaken in India in 1971-1972 indicated that lagoons are an acceptable, low-cost method for treating distillery waste. The study used two lagoons – an anaerobic lagoon to treat the raw waste and a backup lagoon to treat the effluent from the first. The first lagoon was seeded with cow dung slurry and stabilization was achieved in about 1 1/2-2 months. Measured quantities of waste were added to the first lagoon once a day and these amounts were varied three times for periods of 4 months to determine the most effective load. Using this system, the investigators were able to obtain a biochemical oxygen demand (BOD) removal efficiency of 90-95% and a volatile solids reduction of 78%. Further studies on the use of anaerobic effluent in irrigation are under way and study is recommended into the effect of potassium accumulation in the soil. (AC)

2784 **Rogowski, J.J., Koinange Karuga, W., Sadek, F., Christensen, S.** WHO, Brazzaville. *Kenya national tuberculosis programme: evaluation of a test-run in Murang'a District, July 1968-March 1971.* In WHO AFRO Technical Papers No.9, Brazzaville, 1975, 45-94. Engl.

See also entry 2240.

A pilot project to test the feasibility of integrating a tuberculosis programme into Kenya's basic health services was undertaken from 1968-1971. Its objectives were to assess the proposed methods and to recommend improvements. The project was implemented in the health units in Murang'a District, which has a population of 445 310 (1969). Government health units serving the district comprise 1 district hospital, 1 subdistrict hospital, 3 health centres, and 17 health subcentres and dispensaries; other institutions in the area are 5 mission hospitals and 7 mission dispensaries. Methods used for case-finding included direct sputum-smears, X-ray examination, Mantoux test, and clinical examination. X-ray films were read by one radiographer and seven medical officers and all tests were reexamined in blind or double-blind studies. Results indicated that case-finding activities of the programme failed to reach the expected level; reasons included lack of supervision at the periphery, frequent changes of medical officers, and overwork of existing staff. However, of the cases diagnosed at the periphery, more than half were confirmed – a good standard of diagnosis. Treatment was more acceptable and more successful than was forecast; however, microscopy techniques and X-ray film reading were poor. The laboratory personnel missed (under-read) almost half the positive results in sputum cultures and the medical officers and radiographer over-read more than half the X-ray films. Recommendations include discarding unnecessary forms, introducing training programmes in X-ray film reading and case-finding, and ensuring greater stability and supervision in the services. Costs of case-finding and treatment are appended. (AC)

2785 **Rojas Ochoa, F.** *Cobertura de la atencion a la embarazada y al recien nacido en Cuba. (Health coverage for pregnant women and newborns in Cuba).* Revista Cubana de Administracion de Salud (Havana), 2(2), Apr-Jun 1976, 165-169. Span.

Statistics obtained from the Cuban Ministry of Public Health indicate that by 1974 maternal child health services had reached an acceptable level of coverage, thanks to national resources that were adequate, well-distributed, and efficiently utilized. In that year, there were 180 facilities for hospital deliveries, each serving an average of 17 158 women; 609 antenatal clinics, each serving approximately 3 300 women; 141 pediatric facilities; 619 child health clinics; and 49 neonatal services, or one for every 4 085 live births. The national average for prenatal consultations was 9 per birth. Statistical data are presented on consultations per birth from 1967-1974, consultations by province, percentages of births occurring in hospital from 1966-1974, and coverage by neonatal services. (RMB)

2786 **Sangare, S., Ujoodha, I.** *Difficulties in integrating BCG vaccination into the activities of the basic health services.* Bulletin of the International Union against Tuberculosis (Paris), 48, Dec 1973, Suppl., 69-73. Engl.

Since 1969, mass immunization with BCG vaccination has been included in the health services in Mali's maternity units and MCH centres. In 1973, however, a study revealed that only 17 710 of the 66 905 eligible children had been vaccinated. This poor performance was attributed to the absence of public transportation and resulting inaccessibility of the centres, staff shortages and lack of transportation for mobile vaccinations units, lack of obstetrics facilities that would allow immediate vaccination of neonates, poor motivation on the part of the public, lack of a means of storing the vaccine (unavailability of spare parts for refrigerators, etc.), and lack of interest on the part of centre staff. It is concluded that maternity units and MCH centres cannot ensure vaccination coverage and that the service should be extended to clinics and medical outposts. It is noted, however, that the costs of properly equipping such facilities make the solution unrealistic. (HC)

2787 **Scotti, R.J., Karman, H.L.** Women's Community Service Centre, Los Angeles. *Menstrual regulation and early pregnancy termination performed by paraprofessionals under medical supervision.* Contraception (Los Altos, Cal.), 14(4), Oct 1976, 367-374. Engl. 8 refs.

A total 774 consecutive patients whose gestational size was estimated to be 10 weeks or less were aspirated with Karman cannulae attached to a modified 50 ml vacuum syringe at a Los Angeles (USA) women's clinic. The complication rate of 1.3% constituted retained tissue and continuing pregnancies, which were treated by reaspiration, and one infection, which responded to antibiotics; this complication rate was considerably less than that of other types of abortion or menstrual regulation and included no cases of perforation or excessive bleeding. The procedure can be safely performed by trained paramedics under medical supervision and, because it relies on simple, hand-operated equipment, is suitable for remote rural areas without electricity or emergency facilities. Statistical data are included. (Modified author abstract.)

2788 **Shija, J.K.** *Some observations on paediatric surgical problems in Dar es Salaam, Tanzania.* East African Medical Journal (Nairobi), 52(4), Apr 1975, 202-207. Engl.

A study was undertaken to determine the aetiology of pediatric surgical admissions in Muhimbili Hospital, Tanzania. The records of 440 children admitted between September 1972 and September 1973 were analyzed and it was observed that patients came from all the major tribes (about 60) living in and around Dar es Salaam, the ratio of males to females was 3:2, and the diagnoses for the 440 included trauma (40%), infection-induced lesions (24%), congenital anomaly (16%), tumour (3%), and miscellaneous (16%). Two-thirds of the cases were emergency admissions and the rest had been admitted as space was available in the 20 hospital beds allotted to pediatric surgery. Because of the large number of emergencies, it is concluded that many children requiring surgery are not being treated. The establishment of a pediatric surgical unit is recommended. (HC)

2789 **Sirageldin, I., Norris, D., Hardee, J.G.** *Family planning in Pakistan: an analysis of some factors constraining use.* Studies in Family Planning (New York), 7(5), May 1976, 144-154. Engl. 11 refs.

A survey was conducted in 1968-1969 to examine the attitudes of Pakistani women to the national family planning programme. A sample 2 910 married women, aged 49 and under, and their husbands were interviewed and information was sought on pregnancy histories and perceptions, current use, and intended use of contraception. The results suggested that the Pakistani family planning programme is based on an inaccurate axiom – the belief that a broad but latent demand for contraception exists – and that the programme does not provide sufficient personnel or resources to encourage family planning acceptance. Results also indicated that young, fertile women were unlikely acceptors because of sociocultural factors, such as husband's opposition to contraception, the perceived ideal number of children, number of living children, and length of marriage and that the lack of available services reinforced cultural prejudice. Therefore, the latent and overt demand for family planning did not meet the goals envisioned by the programme planners. Graphs and tables illustrate statistics on the knowledge, use, and acceptance of contraception and on variables affecting the present or intended use of family planning. (ES)

2790 **USA, Department of the Navy.** *Hospital corpsman 1 and C.* Washington, D.C., U.S. Government Printing Office, No.0500-193-0200, 1959. 213p. Engl.

In addition to information on U.S. Navy administrative procedures, this advanced training manual for auxiliary hospital corpsmen includes chapters on first aid,

minor surgery, and emergency procedures; diet therapy; pharmacology and toxicology; preventive medicine; and medical responsibility in chemical and biological warfare. An index is included. (RMB)

2791 **Ville de Goyet, C.de., del Cid, E., Romero, A., Jeannee, E., Lechat, M.** *Earthquake in Guatemala: epidemiologic evaluation of the relief effort.* Bulletin of the Pan American Health Organization (Washington, D.C.), 10(2), 1976, 95-109. Engl., Span. 12 refs.

Epidemiologists working with relief teams after the 1976 Guatemalan earthquake contributed primarily in two ways: by assessing immediate problems and by evaluating relief work as a basis for future disaster planning. An epidemiologic surveillance team played an important role in calming the public and in redirecting some of the relief efforts toward reestablishment of the normal health care delivery system. Their observations documented misdirected relief efforts such as airlifting vast quantities of unsorted mixed drugs that, due to lack of coordination and poor timing, overwhelmed distribution facilities. Their findings supported earlier evidence indicating that the risk of epidemic following disasters is often grossly exaggerated; they also indicated that the Guatemalan Ministry of Health acted responsibly in resuming regular disease control programmes and restoring preexisting water supplies. In fact, according to epidemiologists, the Ministry's action was far more effective in practice than some relief groups' crash immunization campaigns. Other findings were that more data are needed on trauma and deaths associated with earthquake destruction, that international relief activity was clearly instrumental in assisting the country's short-term recovery, and that a much larger proportion of international resources is still needed for less popular projects, such as constructing earthquake-resistant buildings. (AB)

2792 **Vis, H.L., Bossuyt, M., Hennart, P., Carael, M.** *Health of mother and child in rural Central Africa.* Studies in Family Planning (New York), 6(12), Dec 1975, 437-441. Engl. 17 refs.

A review of the habits and health status of women and children in Rwanda, Burundi, and Kivu (a province of Zaire) has shown the complex relationship between malnutrition, breast-feeding, and birth spacing. Background for the review came from a study of pregnant women, nursing mothers, infants, and young children in the area. Information was collected in two maternal child health centres and was planned to determine their health status and eating patterns. Findings were that the women were suffering from general endemic malnutrition, which caused a low level of milk production but which had beneficial side effects of delayed puberty and prolonged postpartum amenorrhea. These are two natural means of birth spacing, the latter being encouraged by the custom of breast-feeding infants for 2 years and longer. Although the composition of breast milk was found to be similar to that produced by mothers in industrialized countries, its insufficient quantity meant that supplements, and thus parasites, were introduced into children's diets as early as age 3 months. From these findings, it is clear that maternal nutrition should be improved so that mothers can produce more milk and better withstand the pressures of childbearing and agricultural work. Improvements in maternal nutrition alone, however, would shorten amenorrhea after childbirth and thus produce higher birthrates, earlier weaning, and depleted maternal energy. Efforts, therefore, should be devoted to improving maternal nutrition but also to introducing other means of ensuring birth spacing. (AC)

2793 **Vogel, L.C. Muller, A.S. Odingo, R.S. Onyango, Z. Geus, A. de, ed(s).** *Health and disease in Kenya.* Nairobi, East African Literature Bureau, 1974. 529p. Engl. Refs.

Individual chapters have been abstracted separately under entries 2198, 2253, and 2438.

This compilation of articles by experts in the field of medicine, biology, and veterinary science constitutes a summary of health and disease in Kenya. The first part of the book provides background information on the physical, biological, and social environment, the health services that are available, morbidity and mortality patterns, and health problems of certain population groups. The second part deals with five specific health risks. Numerous maps are used to illustrate environmental and epidemiological data and statistical data appear in tables throughout. (HC)

2794 **WHO, Geneva.** *New trends and approaches in the delivery of maternal and child care in health services; sixth report of the WHO Expert Committee on Maternal and Child Health.* Geneva, WHO Technical Report Series No.600, 1976. 98p. Engl. Meeting of the WHO Expert Committee on Maternal and Child Health, Geneva, Switzerland, 9-15 Dec 1975.

The WHO Expert Committee on Maternal and Child Health met from December 9-15, 1975, to consider new trends and approaches in the delivery of maternal and child health (MCH) care services. The report of this conference discusses the present health status of mothers and children, recent trends, and social and environmental changes. Separate sections deal with: the content of MCH care, such as management of common diseases, care during pregnancy and labour, perinatal care of the infant, infant and child health care, day care of children outside the home, health of the school-age child, care of adolescents, and handicapped children; health education; integrated MCH; and MCH priorities, including nutrition protection and promotion, the prevention and management of infections, family planning, and breast-feeding. Service aspects, intersectoral coordination, manpower development and training, and research needs are also discussed. Fourteen recommendations are presented, urging, among other things, further efforts to extend primary health care to rural areas, give priority to MCH in all developmental plans, develop suitable training programmes for MCH personnel, and stress nutrition and

immunization in all MCH packages. An appendix contains more detailed information and statistical data on international trends in the health status of mothers and children. (RMB)

2795 **WHO, Geneva. Djukanovic, V. Mach, E.P., ed(s).** *Alternative approaches to meeting basic health needs in developing countries.* Geneva, WHO, 1975. 116p. Engl.

Representatives from WHO and UNICEF investigated promising and successful approaches to low-cost health care delivery and have reported their findings in this publication. They devoted particular attention to features that appeared to improve basic health coverage, mobilize resources, increase use of services, promote quality care, and satisfy consumers and providers. Working teams visited programme sites in Bangladesh, the People's Republic of China, Cuba, Tanzania, Venezuela, Yugoslavia, India, Niger, and Nigeria and recorded their observations. Common characteristics of the different national programmes were a strong political will, realistic appraisal of the country's health needs, rational personnel development, and strong central policies implemented by decentralized administration. Schemes covering limited areas shared one major element – a dedicated leader. Features found in both types of programmes were integrated development services, emphasis on health and nutrition education, heavy investment in sanitation, deprofessionalization of health personnel, and community participation. All the programmes shared one major problem: the mechanics of transporting health services across large expanses. Recommendations arising from the investigations were that WHO and UNICEF support programmes in places where a decision has been made nationally to increase basic health coverage, where there is proved potential for change, and/or where local health endeavours could lead to national change. (AC)

2796 **Wiknjosastro, H.** Indonesian Planned Parenthood Association, Jakarta. *Use of paramedical personnel in field programmes for family planning in Indonesia.* Jakarta, Indonesian Planned Parenthood Association, Aug 1972. 9p. Engl. Unpublished document.

Four years after the national family planning programme was launched in Indonesia, a questionnaire on family planning attitudes and activities was sent to 1 000 paramedical personnel. A total 262 responded, comprising 168 midwives, 31 nurses, 58 auxiliary nurses, and 5 sanitarians. Their answers revealed that, although only 76 of them had received formal training in family planning, 98.9% had good knowledge of the subject and were active in the services, 85% were working under the supervision of a doctor, 88% felt that intrauterine device insertion should be conducted by a woman rather than a man, 42% had already been trained in intrauterine device insertion, 62% were distributing condoms, and 61% were prescribing pills. Data are tabulated. (HC)

2797 **Wilson, C.S.** *Child following: a technic for learning food and nutrient intakes.* Environmental Child Health (London), 20(1), Feb 1974, 9-14. Engl.

By closely observing a child's activities for 1 day, an investigator may record everything a child eats, including snacks. This is especially informative in cultures where toddlers roam freely and are offered food from many sources. The reliability of the information obtained will be determined by several factors: the community's acceptance of the investigator, his familiarity with local foods, and his ability to estimate quantities. An example of the practical application of this method is the author's study of three Malaysian toddlers who consumed a substantial proportion of their calories and vitamin C at times other than meal hours. Study findings were that the children consumed adequate protein and other nutrients with the exception of iron, vitamin A, and calcium, and at times thiamin or riboflavin. (AB)

2798 **Worth, R.M., Shah, N.K.** *Nepal health survey: 1965-1966.* Honolulu, University of Hawaii Press, 1969. 158p. Engl.

From 1965-1966, the Nepalese Ministry of Health and the Thomas A. Dooley Foundation sponsored a survey of health problems in Nepal for the purpose of providing data for comprehensive health planning. A seven-member medical team interviewed and examined a sample population of 6 321 that included members from Katmandu. Information was collected on reproductive attitudes and practices, nutrition and nutritional deficiency diseases, infectious diseases of various types, and other debilitating conditions, such as diabetes and bladder stone. The author concludes from the results of the survey that the present high mortality of infants and children could be reduced by training traditional midwives in modern techniques and by teaching rudimentary child health practices to village women. Long-range objectives he proposes include the reduction of fertility, morbidity, and mortality of young adults. He recommends that the following programmes be implemented: training for paramedical personnel, family planning, BCG campaigns to control tuberculosis, smallpox vaccination, cholera and typhoid immunization, improvement of community water supplies, and home treatment of leprosy. Abundant statistical data are provided. Appendix A contains sample questionnaires; appendix B, an entomological report. (RMB)

2799 **Wray, J.D.** *Child care in the People's Republic of China: 1973. Part II.* Pediatrics (Springfield, Ill.), 55(5), May 1975, 723-734. Engl.
See also entry 2206.

This is the second and last part of a series on child health in the People's Republic of China, it discusses nutrition, maternal mortality, prematurity, infant mortality, and child growth and development. The author notes that an estimated 95-98% of all babies are breastfed and that mothers' work schedules are arranged to accommodate this, that cow's milk or a substitute made

of vegetable protein is fed to infants who cannot be breast-fed, that maternal mortality is 1-2 per 10 000 deliveries nationally, that rates of prematurity are strikingly low (approximately 5%), that infant mortality is estimated to be 20-40 per 10 000, and that, on the average, Chinese infants have heights and weights above the North American 50th percentile and above the 25th percentile in later preschool years. Statistical data supporting the findings on growth and development are presented in two tables and three graphs. (HC)

2800 **Wright, J.** *Stages in the achievement of standardized diagnosis and treatment of pulmonary tuberculosis in Niger.* Bulletin of the International Union against Tuberculosis (Paris), 48, Dec 1973, Suppl., 93-97. Engl.

The government of Niger launched a tuberculosis control programme to treat the estimated 20 000 persons with infectious tuberculosis. The programme's methods were to use direct microscopy of sputum from patients exhibiting symptoms, to follow a standard treatment regimen, to set up a pilot project in a town 140 km from the capital to test the effectiveness of case-finding by sputum examination, and to decentralize equipment and supplies. Continuing evaluation and the creation of a voluntary antituberculosis association were also planned. After 5 years, the programme was reevaluated. Findings were that only 19 of the target centres (40) had been staffed and equipped for diagnosis by microscopy, that the number of patients who completed the course of treatment was few (153 of 636 in one centre), that only two of the five target centres in the pilot zone were functioning, that evaluation had been neglected for lack of funds, and that the voluntary association was having difficulty developing. Based on these findings, a new pilot project has been devised. It incorporates supervised methods of diagnosis and treatment, active collaboration of volunteers from the health services, and local participation. (HC)

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