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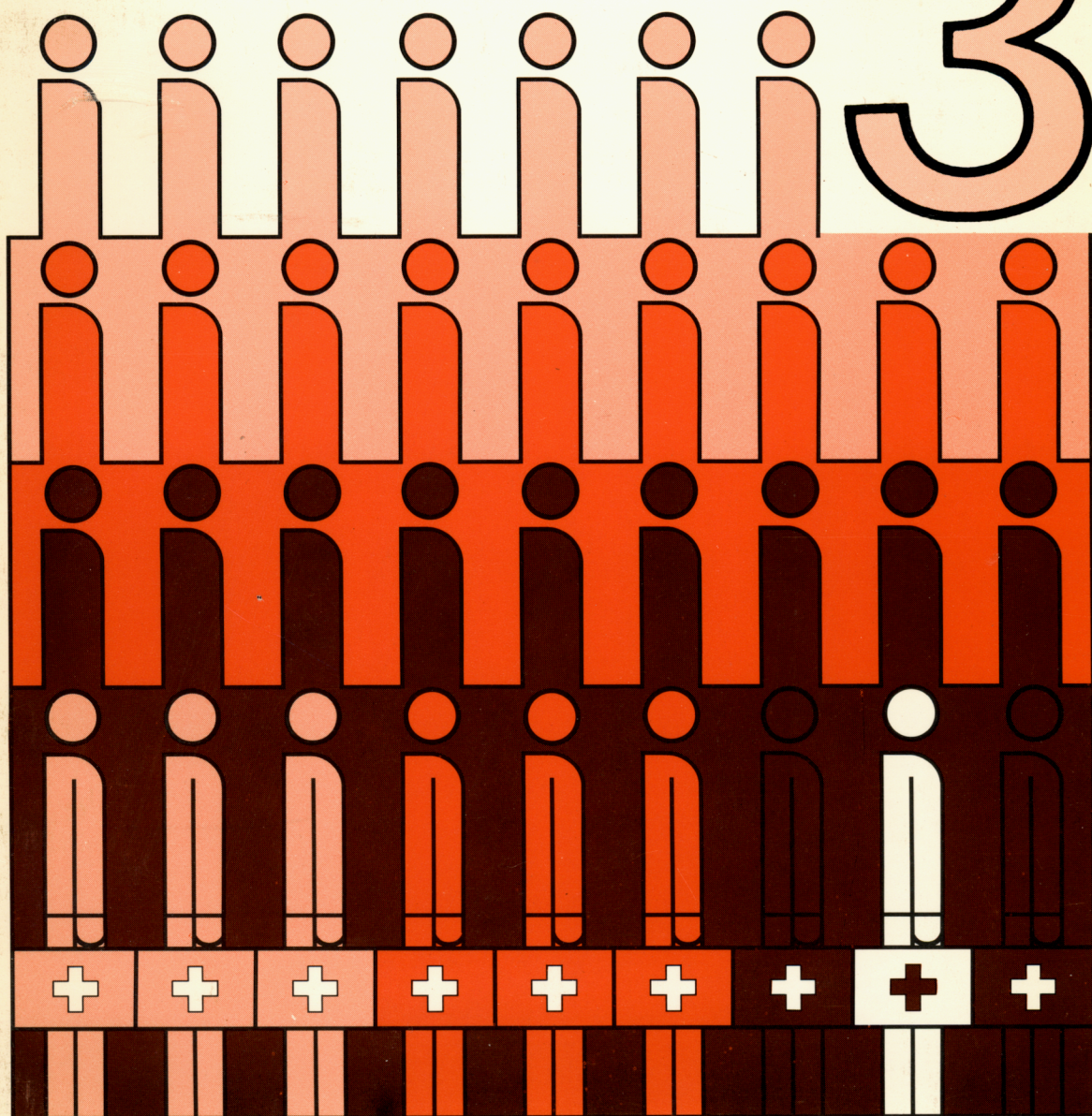
LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

FRANCES M. DELANEY

VOLUME

3



IDRC-093e

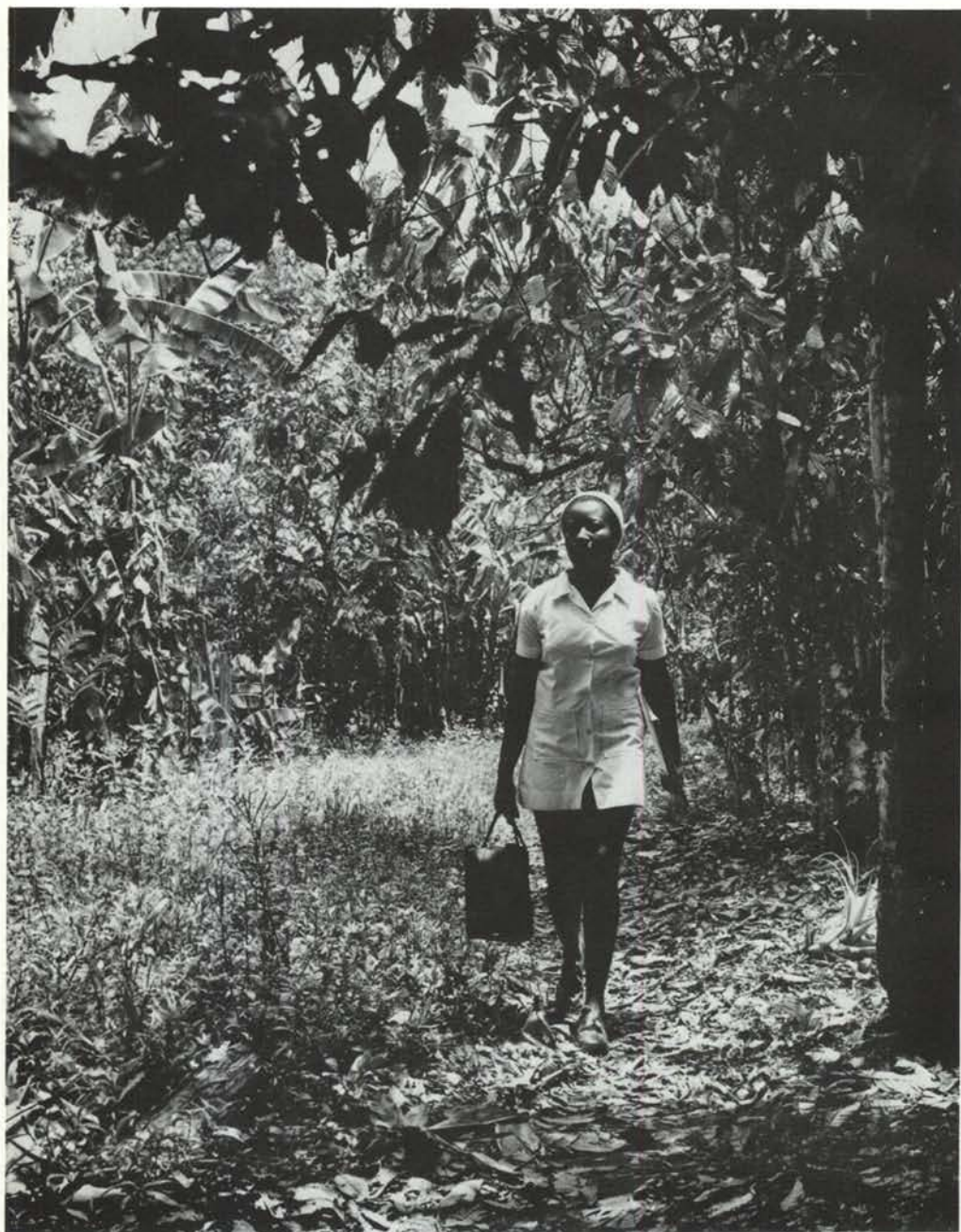
Low-Cost Rural Health Care and Health Manpower Training

An annotated bibliography with special
emphasis on developing countries

Volume 3

Frances M. Delaney

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



Rural health promoter Jeni Páez of Colombia on her way to visit families in the Caponera neighbourhood of Caloto, Cauca Department, Colombia.

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A baby is vaccinated at the mother and child welfare clinic in Ramotswa Village, Botswana.

Preface

This annotated bibliography is the fourth contribution¹ from the International Development Research Centre toward the more effective transfer of relevant information to people concerned with the improvement of health services, especially in the rural areas of developing countries. It includes information about the planning, financing, and organization of low-cost health care systems as well as their relationships with other community organizations and services; the impact of health services on social and economic indices; and the types and functions of different health care personnel.

As in the previous bibliographies, articles are grouped under the headings shown in the "Contents" and arranged, first, in alphabetical order according to the name of the senior author, editor, or compiler and then, where necessary, in chronological order. Non-English titles are translated and diacritical marks omitted because the bibliography is computer-generated. When related information occurs elsewhere in the bibliography, references are given at the beginning of the groups and at the end of citations of certain articles. The subject index was modified to reduce the large groups of reference numbers making it easier to use. The author and geographic indexes are essentially the same.

To obtain information about the kind of people using this series and the kind of information of interest to them, we sent a

questionnaire to everyone on our mailing list. About 17% have responded, most being representatives of health ministries, academic and research institutions, and medical facilities. Their remarks on the usefulness of this series, their suggestions of materials for inclusion in future volumes, and their proposals for related activities are encouraging and useful.

At an International Conference on Health Education in Ottawa in September 1976, IDRC demonstrated on-line retrieval from the health care data base. This data base, which now contains references to 2660 documents, is the basis of this series of bibliographies. Conference participants from many developed and developing countries strongly supported the preparation of these bibliographies.

From the questionnaire, the health education conference, and personal correspondence, two facts have been established. The first is that there is insufficient information available on some subjects — such as cost-effective studies on low-cost rural health care — and in some languages. This is usually because this material is simply unavailable. We do try, however, to identify and include all related material, especially when we know it is of particular interest.

The second fact established is that in previous volumes we did not sufficiently emphasize IDRC's willingness to provide photocopies of documents cited in its bibliographies when it is difficult to obtain these documents locally. (The requested document must not, however, exceed 30 pages. If it does, the IDRC will provide a copy of the table of contents or index (if they exist), the introduction, and any relevant information that could enable the requester to refine his request.) *We urge requesters* to use the coupons at the back of this publication when ordering documents, or letters may be addressed to: *Rural Health Care Bibliography, c/o Library, IDRC, Box 8500, Ottawa, Canada K1G 3H9.*

IDRC is keenly aware of the difficulty encountered by people in developing countries in trying to obtain documents. We are also

¹Akhtar, S. 1975a. Health care in the People's Republic of China: a bibliography with abstracts. Ottawa, International Development Research Centre, IDRC-038e, 182p.

1975b. Low-cost rural health care and health manpower training: an annotated bibliography with special emphasis on developing countries. Vol. 1. Ottawa, International Development Research Centre, IDRC-042e, 164p.

Delaney, F. D. 1976. Low-cost rural health care and health manpower training: an annotated bibliography with special emphasis on developing countries. Vol. 2. Ottawa, International Development Research Centre, IDRC-069e, 182p.

aware that a large volume of material exists in many parts of the world that never reaches a formal information dissemination network. During the next 18 months we may be able to improve this situation by identifying institutions in which copies of our data base, with microfiche copies of the supporting documentation, may be housed so that a more direct regional service can be provided. We also hope to find people associated with health care institutions who will be responsible for collecting material in their own regions and writing abstracts. Enquiries are solicited.

These hopes will not be realized overnight, but we intend to increasingly involve individuals and institutions from the developing countries in this activity, which will indirectly improve their health care.

I thank the individuals and institutions who responded to our questionnaire, and those who sent us literature or references to literature. The continued cooperation of the IDRC Library staff and the IDRC computer team has made preparing this publication easier. **Amy Chouinard** and **Rosanna Desmeules** devoted considerable skill and energy to the many tasks associated with the preparation; **Anita Firth** continues to provide the necessary support for all activities related to this project. To them go my special thanks.

Finally, I gratefully acknowledge the professional assistance of Hope Cadieux, M. Paul McConnell, Donald Leatherdale, and Elizabeth Struthers, all of whom also contributed abstracts.

Frances M. Delaney
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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



A traditional medicine man in Teknaf, Bangladesh.

I. Reference Works

- 1401** Bazilevskaya, N.A., Levanova, M.P., ed(s). USSR, Ministry of Health. *Nauchnaya i metodicheskaya literatura po voprosam organizatsii i metodiki sanitarnogo prosveshcheniya za 1966 god.* (Scientific and methodological literature on the organization and methods of health education for 1966). Moscow, Ministry of Health, Central Research Institute of Health Education, 1970. 46p. Russ.

More than 600 references have been compiled in this document on health education; they comprise articles and other source materials made available in 1966. Although most provide information on health education inside the USSR, a few refer to health education elsewhere. They cover the history and organization of health education; specific projects; and methods and means of educating for health. The references are grouped under 11 main headings and under subheadings within those categories, e.g., under the main heading "Community Health Care Projects: Public Health Activists" is the subheading "The training of sanitation activists" and under it five references appear. An author index is provided. (AC)

- 1402** Cooke, R.G., Miller, A.C. *Summary of medicine for nurses and medical auxiliaries.* London, Faber and Faber, 1973. 156p. Engl.

A handbook for easy reference, this booklet contains an alphabetical listing of medical conditions and medications. Under each illness are outlined its causes, symptoms and signs, complications, treatment, and other points to remember. The manual assumes a basic familiarity with medicine; an example of a simple entry would be *petit mal* or *minor epilepsy*: "Cause: always idiopathic. Symptoms and signs: short loss of consciousness without convulsion. Often staring expression. Action being performed suddenly interrupted and then continued after attack. May be followed by 'automatism.' Frequent such attacks — 'pyknolepsy.' Treatment: ethosuximide. Troxidone. Other point: Usually in children." (AC)

- 1403** Curran Lutheran Hospital, Monrovia. *Health habit.* Monrovia, Liberia, Community Health Department, Curran Lutheran Hospital. Engl.

The series has been abstracted as one item.

This 2-3-page newsletter, produced monthly by the Community Health Department of the Curran Lutheran Hospital, Liberia, contains a review of hospital activities plus useful articles on subjects of interest to rural health workers. Some examples of articles that

have appeared within the past year are the mobile under-fives' clinic; use of visual aids in teaching health education; how to identify the presence of onchocerciasis, amoebae, etc.; and how to conduct a breech delivery. Articles on the identification of parasites and obstetrical problems appear to be regular features. The publication welcomes contributions from its readers, particularly those working in the field of rural health. (HC)

- 1404** Darrow, K., Pam, R. *Appropriate technology sourcebook: a guide to plans and methods for village and intermediate technology.* Stanford, Ca., Appropriate Technology Project, Volunteers in Asia, Nov 1975. 72p. Engl.

More than 50 sources for information are cited in this bibliography dedicated to technology appropriate to developing countries. Each entry comprises the document name, type of publication, number of pages, authors, date of publication, source, and price. Also included are editorial comments and annotations; some of the equipment is illustrated and construction is briefly explained. The documents that are included must list tools and techniques that are low in capital cost; use materials common to developing economies; create jobs for local labourers; are easily understood and controlled by villagers without high level education; or involve energy sources such as wind, sunshine, water, methane, animals, and humans. Subjects include health care and equipment but also water supply, agriculture, food and crop storage, the different energy sources, and miscellaneous other topics. This bibliography does not claim to be comprehensive, and additional publications are planned. (AC)

- 1405** Institute of Development Studies, University of Sussex, Brighton. *Bibliography on health planning in developing countries.* Brighton, England, University of Sussex, Institute of Development Studies, Occasional Guides No.10, n.d. 42p. Engl. 46 refs.

The shift from "health care for the people" to "health care by the people" is a recurring theme in this collection of references on health planning. Citations for 70 documents — 30 books and 40 articles — have been included. Abstracts of the documents range from a few sentences to half a page in length. A lengthy introduction sums up recent thinking in health services and previews the subject matter found in the documents. (AC)

- 1406** League of Red Cross Societies, Geneva. *Panorama*. Geneva, League of Red Cross Societies. Engl.

The series has been abstracted as one item.

This illustrated, tabloid-style publication is put out eight times per year by the League of Red Cross Societies, Geneva. It carries reports on Red Cross activities (organizational, educational, and relief) in all parts of the world and articles on various issues — such as the environment or the allocation of health resources — deemed legitimate concerns of the organization. (HC)

- 1407** National Medical Library and Centre for Documentation, Budapest. *Training and utilization of auxiliary health workers in the health care of rural areas*. Budapest, National Medical Library and Centre for Documentation, 1974. 23p. Engl., Hungarian.

Unpublished document.

The National Medical Library and Documentation Centre in Budapest has compiled this bibliography of articles and books published in the Hungarian language that are related to training and utilization of auxiliary health workers. The listing includes 262 references (from 1961-1973) that emphasize health care delivery and health problems in rural areas. (AC)

- 1408** Rice, D.T. American Public Health Association, Washington, D.C. *Low cost health delivery systems. Preliminary report by APHA in partial fulfillment of contract AID/csd-3423: development and evaluation of integrated delivery systems*. Washington, D.C., American Public Health Association, 22 Mar 1974. 94p. Engl.

Unpublished document.

To assist agencies that are planning low-cost health delivery systems, the American Public Health Association (APHA), under contract to the U.S. Agency for International Development, compiled this preliminary summary of project literature. Sources for information are divided into eight sections. The first refers to two documents on development and evaluation of integrated health systems that are available from the APHA; the second section comments on models developed by organizations involved in large-scale health planning. The next five sections — "Vertical health and family planning programmes"; "Research and training programmes"; "National programmes"; "Service programmes"; and "Recent plans" — deal briefly with specific applications. The final section, "Annotated bibliographies," comprises four literature searches and three nutrition bibliographies. Appendices I-III detail more than 30 specific national programmes and, where possible, include project title, location, target population, host country institution, external organizations, time frame, budget, relevant comments, and references. (AC)

- 1409** Russell, J.M., Oot, D. Population Council, New York. *Bibliography of family planning delivery systems: preliminary draft*. New York, Population Council, 1973. 1v.(unpaged). Engl.

More than 300 references have been collected in this bibliography on family planning services. They have been divided into sections on family planning clinics, health-related facilities, commercial and other sources, home-visiting services, and general information. The documents were published between 1960 and 1973, and many are located in Population Council files. Some are unpublished reports; however, the majority are taken from periodicals, such as *Studies in Family Planning*. Within the basic sections, articles emphasize the evaluation of family planning services and manpower and activities of different projects and personnel. (AC)

- 1410** White, A.U., Seviour, C. International Development Research Centre, Ottawa. *Rural water supply and sanitation in less-developed countries: a selected annotated bibliography*. Ottawa, International Development Research Centre, 1974. 81p. IDRC/028c. Engl.

A selection of the available literature on the subject of water supply and sanitation in developing countries is presented. The 242 items are grouped under three broad headings: a general approach to the problems; the available technology that lends itself particularly to rural areas with small communities; and the relationship of water supply and sanitation to health, disease, and well-being. Some of the material is fugitive in nature and available only at the discretion of the issuing agency. An abstract of each document is included and citations detail the source of information. The earliest document was published in 1948; the most recent, in 1974. Author and subject indexes are provided. (HC)

- 1411** WHO, Geneva. *Notes: selected categories of health personnel: titles used in different countries*. In *World Health Statistics Annual 1967*, Geneva, WHO, 1970, xvii-xxxiv. Engl., Fren.

This WHO survey gives information on selected categories of health personnel in different countries of the world. Each category of personnel — medical assistant, dental assistant, pharmaceutical assistant, nursing personnel, laboratory technician, auxiliary laboratory technician, sanitarian and auxiliary sanitarian — is defined briefly. This is followed by a description of the title and number of years of general and professional education required in each country. Countries are listed alphabetically and grouped by regions of the world. (HC)

- 1412** WHO, Geneva. *Bibliography on medical education*. WHO Chronicle (Geneva), 24(5), 1970, 224-227. Engl.

A continuing bibliography on medical education is maintained at WHO in Geneva. It comprises the titles of articles that have appeared in established technical journals since 1956 and now contains over 8 000 references. Selected lists on any aspect of medical education may be obtained by writing to the education division and supplying the reference number of the subject of interest. The classification system, complete with reference numbers, is set forth in this article. (HC)

II. Organization and Planning

II.1 Health Manpower

See also: 1509, 1514, 1530, 1532, 1634, 1668, 1711, 1732, 1770, 1815, 1973

- 1413 Anderson, J.A.** *Health team in the community.* Lancet (London), 27 Sep 1969, 679-681. Engl.

Three experimental models are suggested for defining lines of authority and communication within a community health team. The first model is for a doctor to examine a patient and then to delegate certain primary procedures to a paramedical worker trained in basic skills such as applying dressings or giving injections. The second model is one in which an auxiliary health worker substitutes for a doctor in preliminary examinations and decides whether to refer or to treat a patient. The last model combines the other models and allows the patient to choose between a doctor or a worker highly trained in a specialty. This mode requires that doctors and auxiliaries regularly share experiences so that the patient receives the best care possible. (ES)

- 1414 Aujaleu, E.** WHO, Brazzaville. *Pilot study on the needs in health personnel adapted to conditions in the African region.* Brazzaville, WHO, 12 Apr 1972. 58p. WHO/AFR/PHA/93. Engl.

In 1970, two consultants visited four African countries (Liberia, Kenya, Cameroon, and Malagasy R) to examine existing cadres of professional and auxiliary health personnel and the task distribution among them; existing and future needs in health personnel; existing training facilities; and the means of providing suitable basic and further training for present and future needs. This paper presents a summary of the most significant facts noted by the consultants, their conclusions, and consequent recommendations regarding further studies that could be undertaken to help the countries of the African region to define, train, and deploy categories of health staff best suited to present conditions and those expected to prevail over the next 10-15 years. The recommendations constitute the entire second half of the report and mainly concern problems peculiar to the training and utilization of auxiliary cadres at the peripheral level. (HC)

- 1415 Bhatia, J.C., Gandhi, H.S.** *Orienting doctors for rural health needs and services.* Manpower

Journal (New Delhi), 9(2), 1973, 51-68. Engl. 11 refs.

India's primary health centre concept grew out of a set of recommendations enunciated by the Health Survey and Development Committee in 1946. The recommendations called for the establishment of a chain of health centres to provide the country's rural inhabitants with tax-supported curative and preventive services. Unfortunately, the task of interesting physicians in working in primary health centres is proving a difficult one; attempts to whet their interest in the practice of curative medicine under primitive conditions, health education, sanitation campaigns, epidemiological and demographic surveys, etc. through the rural internship programme have only discouraged them from seeking rural employment. Since the success of the primary health centre complex depends upon the effectiveness of the physician in charge, the need to improve the services and image of the rural health centre is crucial. The author suggests that medical education be reoriented toward rural health needs and that the specialty of social and preventive medicine receive the status and prestige it deserves. A "statistical supplement" includes a diagram of the administrative structure of the primary health centre, the type of staff it requires, and the projected numbers of facilities and staff, and their costs, needed for the next 20 years. (HC)

- 1416 Christian Medical Commission, World Council of Churches, Geneva.** *Provision of basic health services for the deprived: health manpower training for basic health services.* In Christian Medical Commission: Annual Meeting 1974, Geneva, Christian Medical Commission, 1974, 20-26. Engl.

See entry 1440 for complete proceedings.

This paper surveys the problems that permeate health manpower planning and training in developing societies. It proposes solutions and suggests strategies for implementing them. Primarily, the problems arise because (1) present planning procedures do not consider the society's health needs; (2) financial and teaching resources are not appropriately distributed; (3) student selection policies are not equitable; and (4) present teaching methods do not foster community-oriented health care. To solve the problems, the community's health needs should be surveyed, and the community itself should help decide its health priorities. New training programmes should then be geared to those priorities, and present training programmes for sophisticated health workers should be cut back to provide

adequate training resources (both human and financial). The community should also participate in setting student selection policies (quota systems, etc.) to ensure that the students represent the population served. Finally, the teachers, as well as teaching methods, should be chosen, in part, for their ability to encourage openness and cooperation among students and the community. (AC)

- 1417 Deodhar, N.S.** *Medical social worker, occupational/physiotherapist, pharmacist, laboratory technician, and dental hygienist, etc.* Indian Journal of Medical Education (Bombay), 11(2-3), Apr-Sep 1972, 176-177. Engl.

At present the health services in India require a team of workers with varied skills, and the basic health workers and auxiliary nurse-midwives need further education to contribute effectively to the team. Further education is also required for the team leaders and should be aimed at imparting skills in group dynamics, etc. Such emphasis would enable supervisory staff to think less of disciplining health personnel and more about directing and coordinating health services. This and other continuing education should be given to multidisciplinary groups to ensure an understanding of the organization and to enhance team spirit. Also, the team leaders should provide continuing educational opportunities for their staff through periodic conferences and workshops. Finally, all changes in training, career planning, etc. should take into account existing personnel and hierarchy. (Modified author abstract.)

- 1418 Hall, T.L.** *Health manpower in Peru: a case study in planning.* Baltimore, Md., Johns Hopkins Press, 1969. 281p. Engl.

The author discusses the current need and projects the future demands for health manpower in Peru in terms of demand analysis. In separate chapters he deals with physicians, dentists, pharmacists, nurses, professional midwives, and auxiliary health workers as facets of Peru's general health manpower resources. The final chapters are concerned with bringing supply and demand into balance and issues in health manpower planning. The text includes many tables. (RD)

- 1419 Long, E.C., Viau D., A.** *Health care extension using medical auxiliaries in Guatemala.* Lancet (London), 1(7848), 26 Jan 1974, 127-130. Engl.

In 1971, the Ministry of Public Health and Social Welfare, Guatemala, embarked on a programme to raise the level of rural health at a reasonable cost. By using feasibility studies, it devised a four-tiered health care delivery system and has since implemented it. At the first level, health promoters and indigenous midwives, trained 3 and 4 weeks respectively, minister to basic needs in rural communities. At the second level, rural health technicians and auxiliary nurses provide preventive, promotive, and some curative care from health posts where they are stationed. Auxiliary nurses, who receive 14 months training after completing primary school, form the backbone of rural health services, being the largest staff component of the country's

health posts, rural health centres, and regional hospitals. Rural health technicians, who undertake 20 months training — 70% field work — after 9 years of formal education, visit the village health promoters and midwives and advise them. Levels three and four constitute the referral component of the system: the health centres and regional hospitals staffed by physicians and support personnel. Evaluation of this system is expected to last 6 years and will be conducted under the supervision of the Guatemalan Medical Association. (HC)

- 1420 Long, E.C.** *Health team concept.* Ghana Medical Journal (Accra), 12(1), Mar 1973, 96-103. Engl. 9 refs.

Actualizing the concept of a team working together for health within a community requires careful planning for selection, training, and evaluation of health manpower. Obstacles to it include the traditional hierarchy of health personnel, established curricula that are inappropriate, and prevalent attitudes that collaboration is a sign of weakness. "In the community team, the hierarchy is unclear depending upon the information and skills needed to solve a particular problem" Training, then, should have two components: the functions that are best taught to an individual profession and those that rely on teamwork and are best taught within a group setting; whenever there is a choice, the group setting should be used, although this approach may demand radical change in traditional training programmes. Because the objectives of community health care are diverse, evaluating the effectiveness of the health team in meeting them is complex and, at present, no foolproof method has been devised. (AC)

- 1421 Medical Journal of Australia, Sydney.** *Physician assistants - and others - in primary health care.* Medical Journal of Australia (Sydney), 1(5), 29 Jan 1972, 201-202. Engl.

Physician's assistants have assumed vastly different roles throughout the world, and the possibility of their introduction into Australia should be investigated. In the USA, they have been divided into three classes: those with extensive training who can perform diagnostic and therapeutic functions; those with specialized training in one area such as child care; and those who perform lesser tasks of a great variety under supervision. In the USSR, feldshers, who compare to the Western "physician assistant," engage in preventive and curative medicine, sanitation and hygiene, and laboratory work. In Ghana, two different paraprofessionals exist — a health care superintendent who receives 1 years training after 10 years nursing experience and a nurse/anaesthetist who learns to perform almost all anaesthetic tasks. Another example can be found in Canada's far North where nurse practitioners fulfill most of the functions of a physician. The legal, licensing, economic, and disciplinary problems posed by the use of physician's assistants must be solved before their introduction can be viable. Another problem is the possible hostility of traditional doctors and nurses who see

these workers as a challenge to their own authority. (ES)

- 1422 Mojekwu, V.I.** *Education and training implications of a new rural health care delivery system.* Cambridge, Mass., Harvard Graduate School of Education, Center for the Study of Education and Development, Apr 1972. 75p. Engl. 148 refs.

The current health delivery and training systems in Midwestern State, Nigeria, are examined critically and concluded inappropriate to the prevailing disease pattern; some changes in educating and deploying health personnel in order to make the health system more responsive to the people's needs are suggested. These include the following: deemphasizing physician education and stressing the training of "nonmedical providers" (auxiliaries); transferring functions from high-salaried to low-salaried personnel; analyzing the content in auxiliary courses and making it more relevant; preparing teachers for their role as auxiliary educators; training doctors and nurses in the art of supervising (as opposed to "bossing"); and introducing meaningful career ladders for auxiliaries. A suggested curriculum for the auxiliary comprises five teaching modules: "inducing social change" or health education; diagnosis, screening, and treatment; mother and child health; environmental health; and bedside nursing. The most important module is health education, equaled only by study within the student's specialty. Appendices include a map of Midwestern State; WHO-recommended methods for providing basic health services; a list of problems in data collection; a graph of doctor-patient ratios in various developed and developing countries; and curricula for four types of auxiliary health workers deployed throughout Nigeria. (HC)

- 1423 Pradhan, P.N.** *Scheme for rural medicine in India.* In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 35-36. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

An Indian physician distinguishes between unqualified indigenous practitioners, qualified indigenous practitioners, and "quacks." The unqualified or village physician (*Vaidya*) is one who learned the art of healing from his forefathers and possesses no diploma or degree. The qualified indigenous practitioner is one who has passed the required examination on the body of knowledge contained in the "Standard Ayurvedic Books." He is generally found in towns or cities. The "quack" is defined as a qualified or unqualified practitioner who after a short period of training in modern medicine is allowed to practice in rural areas in the tradition of the Chinese barefoot doctor. The author feels that it would be preferable to intensify or refresh the training of both qualified and unqualified practitioners in their own school of medicine, adding perhaps some

training in modern (Western) first aid and minor surgical procedures. (HC)

- 1424 Reinke, W.A.** *Alternative methods for determining resource requirements: the Chile example.* International Journal of Health Services (Westport, Conn.), 6(1), 1976, 123-137. Engl.

Health services utilization rates in Chile have been statistically investigated using multiple regression analysis, automatic interaction detection analysis, and multisort analysis; the results from each analysis and from combinations of all three have been compared and considered for their use in forecasting health manpower needs. Six variables were used: residence location, monthly per capita income level, sex, age, insurance benefit status, and years of education. Although multiple regression analysis cannot provide for the correlations between variables, it was employed for information purposes. Automatic interaction detection analysis indicated that age was the most significant variable, and subgrouping the variables showed that the highest rate of physician utilization existed among preschool children and adults over age 49 who had 4 years schooling and were members of the highest per capita income group. Multisort analysis, on the other hand, explained many of the questions provoked by automatic interaction detection, while posing many of its own in isolation. Age, sex, and insurance benefit status were shown to be highly significant, and a correlation between age and income was identified. It was concluded that a combination of multisort and automatic interaction detection techniques would be the most reliable indicator for health manpower planning. Data from analyses are tabulated. (AC)

- 1425 Sene, S., Diop, B.** *Contribution de la femme senegalaise a l'amelioration de la sante familiale. (Woman's role in improving family health in Senegal).* Medecine d'Afrique Noire (Paris), 22(12), 1975, 785-789. Fren.

The traditional role of the Senegalese woman in health care delivery is briefly traced, and her present role as liaison between the family and the health services and as professional health worker is examined. Professional qualification is seen as an extension of the woman's traditional vocation, and women are employed in eight cadres ranging from community health teaching aide to physician. These cadres are briefly described and the number of women employed in each, as of 1973, is set forth. In the concluding remarks, the importance of recognizing and encouraging the contribution of women in health care at both the household and the professional levels is emphasized. (HC)

- 1426 Singh, H., ed(s).** *Public health education and training.* Indian Journal of Public Health (Calcutta), 11(1), Jan 1967, 20-22. Engl.

See also entry 1996.

A summary of each of the papers presented by participants in a workshop on public health education and planning, India, is set forth; they call for greater emphasis on community health in medical curricula; more

administrative skills in physician education; continuing evaluation of course content; etc. The terms "paramedical" and "auxiliary" are defined, and the challenge involved in training 50 000 basic health workers and 10 000 supervisors (the estimated required numbers) is pointed out. (HC)

- 1427 WHO, Geneva.** *Health manpower development.* WHO Chronicle (Geneva), Jan 1976, 32-34. Engl.

In many African countries the shortage of health manpower undermines all attempts to plan an effective health care delivery system. The few physicians available are concentrated in urban areas; therefore, Western, doctor-oriented systems are not suitable. Recognizing this, WHO has supported meetings and courses in teaching methodology for the purpose of reorienting health teachers to local needs. There is a new emphasis on health teams trained to work together, on student responsibility for continuing education, and on the use of auxiliaries, who are even scarcer than physicians. WHO has also assisted educational centres and provided fellowships so that more medical personnel can be trained in Africa. However, most African countries still need to define their national priorities with regard to health training. (RD)

- 1428 WHO, Geneva.** *Use of "medical assistants" for improving health services: suggested guidelines for promoting the use of medical assistants.* Geneva, WHO, 1973. 13p. WHO/EDUC/73.163. Engl.
See also entry 1815.

Although medical assistants have proved valuable members of many health systems, they must be introduced gradually and purposefully. Their functions and responsibilities must be clearly defined in advance, career opportunities accounted for, and their relationship to the community and the rest of the health team firmly established. Advantages and disadvantages of their introduction should be objectively assessed so that the need for them will be obvious. Activities to promote their acceptance should be undertaken and could include holding meetings with a community's leaders to provide examples of their successful introduction elsewhere, providing data on cost-benefits of such programmes, involving local medical personnel in discussions, extolling the benefits of medical assistants in public information campaigns, and arranging for outstanding medical assistants to visit local communities. Annexed are an outline of a possible career ladder for medical assistants and a short bibliography. (AC)

- 1429 WHO, Geneva.** *Consultation on classification of auxiliary health personnel: report.* Geneva, WHO, Apr 1972. 12p. WHO/EDUC/72.154. Engl.

To dispel some of the confusion that surrounds different cadres of auxiliary health personnel, a group of consultants to WHO developed a method of classification for auxiliaries. The system relies on criteria of performance as well as traditional criteria of education and training. Criteria of performance comprise the

width of competence within a profession, depth of technical responsibility, ability to work independently, and supervisory ability, whereas the criteria of education and training are simply the number of years of education required to enter training and the actual period of training. By assigning numbers to the professions, such as medicine I, and by scoring one to four for each criterion, the group categorized health personnel in levels A, B, C, or D such that a physician would be A-I, etc. It also suggested WHO utilize this system in its publications to describe cadres within different countries. (AC)

II.2 Organization and Administration

See also: 1415, 1419, 1509, 1514, 1522, 1529, 1530, 1541, 1544, 1554, 1560, 1572, 1579, 1634, 1636, 1640, 1642, 1657, 1670, 1825, 1891, 1994, 2000, 2001

- 1430 Adalja, K.V.** *Development of the medical services in Kenya.* East African Medical Journal (Nairobi), 39(3), Mar 1962, 105-114. Engl.

The history of colonial medical services in Kenya from 1895 is the subject of this article. As early as 1895 the British began providing some relief for diseases like yaws, sleeping sickness, and malaria, but services were primarily limited to colonials. From 1908-1920, preventive measures increased slightly, and a sanitary department was established. Most efforts were curtailed by World War I, but in 1921 interest in colonial services was renewed with much planning and policymaking. An Ordinance requiring preventive health and housing improvements for all people in the country was a landmark in the services. By 1932, 14 medical units, which were staffed primarily by Europeans, had been established and about 1 000 Africans had been trained as paraprofessionals. But from 1933-1944, few new developments occurred. From 1945-1952, recommendations from the Development and Reconstruction Authority Report were put into practice. These included expansion of most facilities and the beginning of a blood transfusion service. Throughout the history of health services in colonial Kenya, missionaries and private agencies provided many services not offered by the government. (AC)

- 1431 Assar, M., Jaksic, Z.** *Health services development project in Iran.* In Newell, K.W., ed., *Health by the People*, Geneva, WHO, 1975, 112-127. Engl.

See also entry 1477.

In 1971, a 1-year project was undertaken in Iran to test a methodology for developing comprehensive health services. West Azerbaijan, a province of more than a million inhabitants, was chosen as a field area. The project proceeded in five stages: specification of objectives; situational analysis through extensive field observation

and data collection; formulation of proposals; feasibility studies; and finally, implementation and evaluation. Examination of the existing rural health service — a health centre network — revealed that it was not functioning at an optimal level. Strengthening this network at selected points was deemed preferable to extending it. To this end, the following objectives were formulated: the development of front-line health posts staffed by primary health workers (auxiliaries); the reinforcement of supervisory and referral services; the integration of essential curative care with active preventive services; and the improvement of the training and management capabilities at the district level. The role of the primary health worker as a bridge between the population and the service is emphasized. After a 1 year deployment, primary health workers were observed to have reduced the demand (in terms of numbers of patients) on the rural health centre physician. (HC)

- 1432 Badia, R. de J.** *Sector salud y reforma administrativa en El Salvador. (Health sector in El Salvador and its administrative reform).* Revista Salvadoreña de Hospitales (San Salvador), 5(1), Jan-Apr 1974, 16-35. Span.

The lack of coordination among different agencies in the health sector constitutes one of El Salvador's major problems, and the solution to the problem is administrative reform. The health sector at present is divided between private services (available to 8.4% of the population) and public services, and responsibility for the public services is divided among different ministries, the university, professional organizations, and the Institute of Rural Colonization. Because these agencies do not coordinate their activities, the resources, which are limited and poorly distributed, are also poorly utilized. Administrative problems within the Ministry of Public Health and Social Welfare are also variations of the same theme. Reform should aim to provide integrated, continuous public programmes to all. Some measures for reform include establishing a central authority for all health activities, relocating personnel to serve better the health priorities, analyzing the Civil Service Law, and instituting a national system for distribution of medical supplies and drugs. (AC)

- 1433 Baldo, J.I.** *Example of an integrated tuberculosis programme in a developing country.* Bulletin of the International Union against Tuberculosis (Paris), 41, Dec 1968, 211-216. Engl.

In 1949, the Government of Venezuela initiated an integrated tuberculosis programme and a course to aid physicians in its application; by 1968, the programme covered 78% of the population. The programme — comprising X-ray examination, BCG vaccination, outpatient treatment, and health education components — is administered through the country's district health centres and supplemented by detection work at the sub-centres and health stations. Its success has been attributed to preparation given to physicians who are involved in the programme. This preparation is an 18-week course, which covers basic information on acute

communicable diseases, pediatrics, physiology, venereal diseases, nutritional diseases, leprosy, etc., and aims to enable doctors (usually general practitioners) to carry out the programme within the context of the country's health priorities. (HC)

- 1434 Banerji, D.** *Health economics in developing countries.* Journal of the Indian Medical Association (Calcutta), 49(9), 1 Nov 1967, 417-421. Engl.

A circular process of sickness and poverty operates in countries like India: people are sick (e.g., tuberculosis) because they are socioeconomically impoverished and because they are sick they become more impoverished. To reverse the process, investments must be made in health, and these must be well planned and purposive. For instance, health services must incorporate family planning programmes so that investments aimed at lowering morbidity and mortality, are not consumed by overpopulation. To identify key areas for investment, planners should objectively calculate the costs and benefits of health programmes. Costs are straightforward, but benefits are less so. No programme will benefit a population if that population does not participate in it. However, planners can anticipate participation if they introduce programmes for which the population has expressed a need. When that need has been met, the resulting community confidence can be shifted to other aspects of the health programme. (AC)

- 1435 Banjo, B.** *Provision of health services in a developing country: with special reference to the Western State of Nigeria.* Journal of the Society of Health (Lagos), 3(3), 1969, 43-51. Engl.

The weaknesses in the present administration of health services in Midwestern State, Nigeria, are examined, and a reorganization for greater efficiency is proposed. Weaknesses relate to over-centralization of decision-making power; civil service control of the Health Ministry by the ministries of establishment and finance; and physical distance between the medical stores depot, which supplies all the hospitals in the state, and the centre of authorization, Ibadan. Suggested changes include: dividing the country into compact health districts under the executive control of a district hospital board for day-to-day management; creating a federal hospital board — "a quasi corporation that is independent of the civil service" — to oversee the provision of health services throughout the country; giving each district hospital board its own share of the health budget on a yearly basis; and recognizing each district board's right to purchase drugs and supplies without higher approval. Alternative sources of financing, alternative staffing arrangements, and the impact of specialization are briefly discussed. (HC)

- 1436 Bice, T.W.** *Comments on health indicators: methodological perspectives.* International Journal of Health Services (Westport, Conn.), 6(3), 1976, 509-519. Engl. 28 refs.

This paper discusses several basic conceptual and methodological problems in the development and use of health indicators. Two tendencies of the movement to introduce health indicators may slow the production of information for decision-making; they are the quest for elegant mathematical formulations of health status indexes and the desire to conceptualize "health" in expansive definitions. To counteract these tendencies it is suggested that health indicators should measure variables specified by a social system model and should be scaled according to units that are relevant to decision-making criteria. (Modified journal abstract.)

- 1437 Bravo, A.L.** *Regionalización: organización y funcionamiento coordinado de los servicios de salud en zonas rurales y urbanas.* (Regionalization: the organization and coordinated functioning of health services in rural and urban zones). Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 77(3), Sep 1974, 231-246. Span.

The Pan American Health Organization is urging Latin American countries to adopt a regionalized system of health services that forms a pyramid. The base, which should be accessible to all, comprises rural, suburban, and urban community health centres. The next level to which patients are referred is composed of community and regional hospitals as well as specialized polyclinics. The apex is national medical centres, which provide medical, surgical, inpatient, and ambulatory services; facilities for teaching medical students; and equipment for conducting scientific and social research. PAHO is also encouraging decentralized administration and budgeting with a view to simplifying bureaucratic transactions and facilitating the management of resources. The proposal is that those in charge of each region will be responsible for programming, supervising, coordinating, and evaluating health programmes; monitoring the health of the communities; and advising all health establishments in the region. Regionalization of health services is characterized by programmatic and territorial integrity, the concentration of specialized resources at the regional hospital level, and the decentralization of basic preventive and curative medical care to general community hospitals and peripheral urban and rural health centres, where universal coverage is given to the entire population. (Modified journal abstract.)

- 1438 Canada, Department of National Health and Welfare.** *Canada's northern health service.* Ottawa, Department of Health and Welfare, Medical Services Branch, n.d. 47p. Engl.

The health services for the Indian and Eskimo communities in northern Canada serve about 47 000 inhabitants who are widely scattered. The system basically comprises five tiers, although compact medical kits are provided to itinerant hunters and others who are particularly inaccessible. Primary care is provided at the village level by a community health worker who has been trained in simple diagnosis and treatment of common ailments. The next layer of the services is the nursing station, which is found in communities of 150 to 700

persons. Three nurses staff the nursing station and refer problem cases to a doctor who visits once a month. Health centres constitute the next tier, and are usually staffed by nurses, community health workers, and public health inspectors. Twelve hospitals dot the North and compose the penultimate layer of health services, while the Camshell Hospital in Edmonton constitutes the final level. A network of radio communications provides contact between all the tiers and, depending on distances and weather conditions, dog sleds, aircraft, and snowmobiles are used for transportation. Recently there has been increased emphasis on prevention of disease and, consequently, well-baby clinics and TB clinics have been widely instituted. (AC)

- 1439 Challenor, B.D.** *Health and economic development: the example of China and Cuba.* Medical Care (Philadelphia), 13(1). Jan 1975, 79-84. Engl. 21 refs.

In the past, many economists have maintained that economic development must precede improvements in health and the quality of life in developing countries; however, Cuba and China have successfully introduced measures that have upgraded the quality of life far above their economic means. These successes have implications for other developing societies, and some of the elements common to the systems should be examined. Both countries committed themselves politically and economically to equalizing the distribution of resources and to providing food, clothing, shelter, and sanitation to their rural populations. The outcome has been control of malnutrition, water-borne diseases, and vector-borne diseases. Life expectancy has increased, and infant mortality has decreased. China and Cuba have both encouraged cooperation and group achievement instead of personal liberty, satisfaction, pleasure, and prestige, and have stressed self-reliance as a national philosophy. They have also elevated the status of public health activities and, through moral urgings, have mobilized their populations to undertake mass campaigns for disease control. (AC)

- 1440 Christian Medical Commission, World Council of Churches.** *Geneva. Christian Medical Commission: annual meeting 1974.* Geneva, Christian Medical Commission, 1974. 55p. Engl. Seventh Annual Meeting, Zurich, Switzerland, 8-12 Jul 1974. See also entry 1416.

The proceedings from the seventh annual meeting of the Christian Medical Commission examine the relationships between CMC members and persons in underdeveloped areas; the relationships of the CMC itself to the local, national, and international communities; and the possibilities for bettering all these relationships. Besides urging the individual member to accept the equality of all men, the articles suggest that publications, workshops, and training programmes be undertaken at both local and national levels to promote leadership in community health. At the international level, the contributors call for broader collaboration with such organizations as WHO and the different agencies

for international development. Brief reports from members in the field, the 1973 financial statement, lists of participants, membership, and guests are also included. (AC)

- 1441 Christian Medical Commission, World Council of Churches, Geneva.** *Christian Medical Commission: annual meeting 1973.* Geneva, Christian Medical Commission, 1973. 71p. Engl.
Sixth Annual Meeting, Geneva, 2-6 Jul 1973.
See also entries 1459 and 1745.

The proceedings of the Christian Medical Commission's sixth annual meeting included extensive reports from members stationed in Nepal, Indonesia, Papua New Guinea, and Guatemala. The reports outlined the CMC activities in the health field. The main theme of the conference was health care and justice, and discussions culminated in a CMC position paper on the subject. The objective was to reduce injustice through equitable health care, and the paper called for a decentralization of services, humanization of hospital care, and economically feasible treatment centres for all. (AC)

- 1442 Costa Mandry, O.** Puerto Rico, Department of Health. *Apuntes para la historia de la medicina en Puerto Rico: resena historica de las ciencias de la salud. (Historical notes on the evolution of the medical sciences in Puerto Rico).* San Juan, Puerto Rico, Department of Health, 1971. 365p. Span.

The history of health services in Puerto Rico from the country's discovery in 1493 by Christopher Columbus to 1971 is set forth; events and statistical data have been tabulated chronologically and explained briefly in textual form. The evolution of medical practice, licencing requirements, inpatient care, dental care, laboratory services, health education, and training for health personnel, is traced from early 1900. An alphabetical index is provided. (AC)

- 1443 Danielson, R.** *Cuban health organization: history and development.* Ann Arbor, Mich., University Microfilms, 1973. 288p. Engl. Refs.
Doctoral dissertation.

Since 1959 the Cuban health care system has eradicated polio and malaria, established the best early cancer detection programme in the world, and achieved control of tuberculosis and leprosy. The revolutionary government has committed itself to the eventual integration of all primary services with the most sophisticated hospital care and has opposed the substitution of physicians by auxiliary health personnel, whose role in Cuba has therefore been minimal. These government policies have led to the centralization of inpatient services and the decentralization of outpatient services. Provincial and regional administrative and service levels have been established using the Czech health system as a model. As a result of the emphasis on larger hospital facilities, the number of hospitals has declined from 339 to 219, but hospital beds have increased from 25 170 to 41 027, or from 3.8 to 5.1 beds per 1 000 inhabitants. The basis of the new decentralized outpatient

care is the polyclinic, serving a population of 25 000 to 35 000 in urban areas and as few as 7 500 in rural regions. The polyclinics operate independently of local hospitals, although there is some interchange of staff. All health services and many drugs are free. In addition to exhaustive material on the history of health care delivery in Cuba, this thesis contains chapters on medical education, the polyclinic, and auxiliary health workers. (RD)

- 1444 David, H.P.** *International trends: a nurse in Tanzania.* Journal of Psychiatric Nursing and Mental Health Services (Thorofare, N.J.), 13(3), May-Jun 1975, 37-39. Engl.

Community rather than institutional care has been found an appropriate answer to mental illness in Tanzania. Psychiatric units equipped to provide modern therapy were opened at all regional general hospitals and consulting and teaching hospitals. Then *ujamaa* (socialistic) psychiatric villages — for, and run by, the mentally disturbed — were built around each unit. The senior psychiatric nursing officer is responsible for organizing, planning, and directing all nursing and teaching activities in both unit and village. Since the maximum length of hospital stay is 4 weeks, the village provides a convalescent home for the patient. To minimize feelings of rejection in a society where extended family bonds are strong, the patient's relatives are encouraged to visit him. Follow-up and outpatient sessions, which a patient may attend in the company of relatives, complete the services offered. In addition to the advantages already cited, the village scheme is less expensive in terms of staff than is the traditional mental hospital; the village described has a staff-to-patient ratio of only 4:50. (HC)

- 1445 de Beer, J.** *Forward view of health services in South Africa.* South African Medical Journal (Cape Town), 50(11), 13 Mar 76, 431. Engl.

The author calls for better coordination of health services in South Africa. He asserts that political influences prevent the introduction of a suitable system and that the central Department of Health, Homeland governments, and provincial authorities are all vying for autonomy instead of cooperating for the welfare of the population. By combining their resources, these agencies might realize a basic health service — one that is used consistently by at least 80% of the population. Although priorities of such a service might change, some objectives suggested by the author are a stronger attack on tuberculosis and increased provision of outpatient versus inpatient care for TB patients; greater dissemination of supplemental foods to alleviate nutritional deficiencies; more emphasis on health education; and greater output of health manpower (nurses, physicians, and dentists). (AC)

- 1446 de Vinatea C., J., Gil H., A.** *Plan de medicina comunitaria para el valle de Nepena. (Community medicine plan for Nepena Valley).* Trujillo, Peru, Universidad Nacional de Trujillo, 1975. 26p. Span.

Valle de Nepena is an isolated rural district located on the west coast of Peru. In 1970, the area was struck by an earthquake, which completely destroyed the only hospital. A community health programme comprising community diagnosis, health education, and health services was devised and implemented primarily by the medical department of the University of Trujillo. Results of the health survey and the programmes devised to meet the needs of the area are set forth in some detail. By 1974, the community health programme was operating smoothly and the community, realizing the value of the programme, agreed to take on full financial responsibility for it. Schedules used in community diagnosis and record keeping are appended. (HC)

- 1447 Donabedian, A., ed(s).** American Public Health Association, Washington, D.C. *Guide to medical care administration, volume II: medical care appraisal - quality and utilization.* Washington, D.C., American Public Health Association, 1969. 221p. Engl. 201 refs.

This volume is described as "the most exhaustive discussion of theoretical and operational aspects of medical care appraisal currently available" and is concerned with "methods which can keep the quality of care under constant surveillance." The material is divided into five parts: the first discusses various approaches, levels of concern, definition of quality, etc.; the second part treats some selected methods of medical care appraisal (statistical display and analysis, etc.); the third discusses some issues surrounding appraisal techniques; the fourth deals with issues regarding policy and implementation; the fifth points out some directions for further research and development; and the sixth constitutes a synthesis and conclusions. An annotated, selected bibliography of 104 items entitled "Methodology in evaluating the quality of medical care" is appended. (HC)

- 1448 Dwivedi, J.K.** *Medical care in India.* World Hospitals (Oxford), 3, 1967, 40-45. Engl., Fren. Summaries in Spanish and German.

As a result of the recommendations of the Bhore committee in 1946, the Union Government of India adopted a scheme for providing health care to its entire population. The scheme, divided into 5-year stages, focused on the rural areas in which more than 80% of the people reside. The primary health centre was chosen as the basic element of the scheme, and since that time such centres have been established in every community development area. Each centre serves about 66 000 people and is equipped and staffed to undertake prevention of communicable diseases, health education, maternity and child health services, family planning, and health statistics collection. Referrals may be made to the subdivisional headquarters hospitals and from there to a district headquarters hospital. Along with the primary health centres, there are a large number of dispensaries that offer curative services; these are run by local and state authorities as well as charitable and religious orders. Approximately 4.6% of the population receives medical care through various insurance

schemes and from employers; medical services for the remainder, however, are provided free of charge. Statistical data are included in tables and provide a picture of the health services in India from 1947 to 1964. (AC)

- 1449 Ebrahim, G.J.** *Model of integrated community health care: community health care in a rural area.* Tropical and Geographical Medicine (Haarlem), 28, 1976, S5-S52. Engl. 31 refs.

The meaning of development has shifted from economic improvement to the improvement of human resources. This in turn has caused a change in emphasis from buildings and facilities to education and health services. Unfortunately, these changes have only marginally benefited the rural dweller who represents 80% of the population in developing countries. To remedy this anomaly, some innovative health programmes have been introduced, and a model for health programmes can be discerned. It comprises four main components: the health post, the dispensary, the health centre, and the district hospital. Each component engages in preventive and promotive health, and a referral system operates such that the personnel located at the district hospital visit the health centre once a week and the health centre staff make weekly visits to the dispensary and the health post. The purpose of the meetings is to discuss administrative matters, at-risk patients, and technical developments. The skill pyramid for the model builds from the village health worker and becomes increasingly sophisticated at each level. The functions and responsibilities for each cadre are described, and plans for data collection and evaluation of health services are presented. (AC)

- 1450 Fendall, N.R.** *Medical care in the developing nations.* In Fry, J., Farndale, W.A., eds., *International Medical Care: a Comparison and Evaluation of Medical Services through the World*, Oxford, Medical and Technical Publishing, 1972, 204-248. Engl. 28 refs.

In the decade from 1957-1966, the disparity between developed and developing countries increased and, because of the respective rates of population growth, the trend is likely to continue for some time. At present, developing country populations are increasing at 2.5% annually, and they demonstrate certain characteristics that place an extraordinary strain on economic resources. A few of these are that they include a disproportionate number of children under age 15 who are not economically productive and yet require a vast number of development services; that they predominantly rely in subsistence farming; and they are undergoing urbanization faster than they can accommodate it. Patterns of disease are those "resulting from ignorance, poverty, fecundity, and prejudice"; the broad picture is one of communicable and vector-borne diseases abetted by undernutrition. Within this context, time and geography play major parts. In time, prevalent diseases will change from those characteristic of agricultural societies, to those of early industrialization (poliomyelitis, etc.), to those now found in developed countries. These changes may be far in the future and

will depend a great deal on the geography of a country or area. Even when they do occur, geography will continue to separate many rural peoples from health and other services that improve the quality of life. (AC)

- 1451 Fendall, N.R.** *Medical and health services in Kenya*. University College Hospital Magazine (London), 47, Sep 1963, 41-46. Engl.

In Kenya's health services, the intermediary between local and national responsibilities is usually the medical officer in charge of the district hospital. This person normally holds a dual position, employed by the central government for the district hospital and by the local government for public health activities in the vicinity. This concentration of responsibility means that he may act as liaison between the two levels of government but also that his workload is immense. Supporting professional staff normally include only a public health nurse and a public health inspector, and the bulk of services must be provided by auxiliary personnel. The district medical officer supervises activities in nearby health centres, dispensaries, and health subcentres and depends on the provincial medical officer for advice and guidance. (AC)

- 1452 Fernandez, A.F.** *National health system in Cuba*. In Newell, K.W., ed., *Health by the People*, Geneva, WHO, 1975, 13-29. Engl.
See also entry 1477.

Health services in Cuba, prior to 1959, were primarily curative and entrepreneurial; most were substandard and available only to a minority. The profound changes since the revolution have resulted because the Cuban government accepted and acted upon a mandate to provide free and equitable health care to all. All private and government health services have been incorporated into the Ministry of Public Health, which establishes policies for the entire country. Implementation is on a provincial level, and the ministries of the seven provinces replicate the organizational structure of the central ministry. Provinces are divided into health regions that are further divided into sectors. Sectors provide primary health care to approximately 3 000 persons, and all health professionals within the sectors undertake health education. Every health institution has a health commission, presided over by the medical director; to ensure that the present health services reflect consumer demands, representatives on the commission include members of community organizations, such as labour unions, the Federation of Cuban Women, etc. (AC)

- 1453 Frankenberg, R., Leeson, J.** *Sociology of health dilemmas in the post-colonial world: intermediate technology and medical care in Zambia, Zaire, and China*. In de Kadt, E., Williams, G., eds., *Sociology and Development*, London, Tavistock Publications, 1974, 255-278. Engl. 36 refs.

Drawing most of its examples from Zambia and Zaire, this paper seeks to define the health problems of developing countries in economic and medical terms and to

suggest reasons why the obvious solutions are not being applied. It is widely recognized that an appropriate health programme should: (1) train doctors as educators and preventers of disease; (2) make widespread use of local materials and people, i.e., medical assistants, traditional healers, and rural health centres, rather than Western-style doctors and large, central hospitals; and (3) concentrate on preventive rather than curative measures. However, this preferred system is seldom put into practice; the reason for this, according to the authors, lies in the structure of postcolonial societies. Expatriate doctors tend to impose an inappropriate large-scale technology, and they find ready disciples in local elites who see medicine in terms of national prestige and impressive capital projects. The status of medical auxiliaries is further complicated by medical hierarchy, ethnic divisions, and gender. With the exception of China, which has already succeeded in mobilizing the whole population to take an interest in health, excolonial societies must undergo a transformation. "As long as competition, profit, and self remain the guiding motives, and nations are organized by emerging urban bourgeois elites, there will be no easy solution to medical problems through the appropriate intermediate technology — health centre, district hospital, and auxiliary." (MPM)

- 1454 Frejka, T., Wolfson, M., Kane, P.** *China 1976: a new perspective*. People (London), 3(3), 1976, 2-22. Engl.

This collection of eight articles provides an "up-to-date sketch" of the People's Republic of China. The first article, written by a population expert, assesses population trends and concludes that the possibility exists of China's joining the nongrowing populations but that it is more likely that China will in future grow at rates untypical of developing countries. The next six articles describe educational, health, and planning activities in China, and emphasize the efforts devoted to elevating the quality of life in rural areas. (AC)

- 1455 Gibson, R.** *Organization and management of health centres*. British Medical Journal (London), 2, 9 May 1970, 353-356. Engl.

The facilities, staff, and organization of a health centre should be planned so that a patient's total health needs from birth to death can be anticipated and managed; such a setup should also promote a family/doctor relationship and eliminate noise and unnecessary motion. Facilities should include waiting, examination, and treatment rooms; X-ray, laboratory, and physiotherapy departments; and specially equipped rooms for teaching. Staff should include persons willing and able to undertake nursing, home visiting, midwifery, medical diagnosis and treatment, laboratory and X-ray procedures, physiotherapy, counseling, and clerical duties (including medical records maintenance). The organization should incorporate satisfactory and efficient systems for registering patients, recording visits, and maintaining records; it should also provide for cooperation and input from all staff on administration procedures. (AC)

- 1456 Gonzalez, C.L.** "Simplified medicine" in the Venezuelan health services. In Newell, K.W., ed., *Health by the People*, Geneva, WHO, 1975, 169-190. Engl.

See also entry 1477.

This summary presents the origins, objectives, organization, and present status of the "Simplified Medicine" programme of the Venezuelan health services. The programme, introduced in 1962, ensures that rural communities will receive at least some elementary health care. This is provided by auxiliary health workers, locally selected, carefully trained, and subject to continuous, education-oriented supervision. These workers have the necessary skills to perform simple and clearly defined tasks of primary health care that can be delivered directly and continuously to people living in remote areas. The programme is being implemented at the traditional village dispensaries, the most peripheral level of health services; but because of the need for supervision and referral, the programme can only be successful where there exists an organized regional health service able to provide the necessary technical and administrative support. The development and implementation of the programme, its guiding principles, the selection and training of staff, and the type of services delivered are all described. The author also discusses some of the administrative and social obstacles that must be overcome to ensure the continued expansion and success of the programme. (MPM)

- 1457 Gross, B.** Pan American Health Organization, Santiago. *Algunos factores para evaluar el rendimiento administrativo de la planificacion del desarrollo. (Some evaluation factors of administrative efficiency in development planning)*. Santiago, Pan American Health Organization, n.d. 19p. Span. 9 refs.

The efficiency of an organization depends firstly upon its own administration and, secondly, upon the efficiency of the infrastructure in which it operates. The purpose of this paper is to suggest ways in which organizational efficiency can be improved through the application of sound administrative practices. Various "efficiency indicators" are selected and discussed, and potentially misleading ones are pointed out. For example, high utilization rates in a given health service may be a sign of its popularity or of a lowering of the quality of service offered. Various methods for improving the operation of services are set forth. Finally, it is pointed out that development plans should not be overly ambitious; rather, they must be designed with the capabilities of the implementing agencies in mind. (HC)

- 1458 Harding, T.W.** WHO, Geneva. *Mental health services in the developing countries: the issues involved*. In Baasher, T.A., Carstairs, G.M., Giel, R., Hassler, F.R., eds., *Mental Health Services in Developing Countries*, Geneva, WHO Offset Publication No.22, 1975, 1-5. Engl.

See entry 1743 for complete proceedings.

The need for mental health services in the developing world is vast: an estimated 40 million persons who suffer from serious mental disorders receive no treatment. However, some small investments have been made in places like Sarawak, Colombia, Zambia, Uganda, and Nigeria, and the programmes have netted ample returns. Efforts should be made to adapt the successful experiences to other environments, but before wide-scale adaptation will be possible, the priority of mental health services must be recognized, the structure of mental health services reviewed, and the responsibility of mental health duties extended to all health workers. Issues and methods for accomplishing these processes are discussed. (AC)

- 1459 Hellberg, J.H.** Christian Medical Commission, World Council of Churches, Geneva. *Papua New Guinea: a case study on integration of government and church health services*. In Christian Medical Commission: Annual Meeting 1973, Geneva, Christian Medical Commission, 1973, 11-17. Engl.

See entry 1441 for complete proceedings.

In Papua New Guinea, the Churches Medical Council, composed of Catholic and Protestant groups involved in health care, is integrating its health services with those of government. The survival of relevant missionary work depends on this melding, and the process requires planning at the national, district, and local levels. Programmes undertaken by churches should support the national goals, which call for equality, decentralization, and financial self-reliance. In the present system, basic health services are provided for the 2 1/2 million people by low- and middle-level auxiliaries. Church-related groups should support this system and oppose a move toward more expensive curative services and medical education, which lead to "elite repair medicine." Church-related institutions that focus on curative activities within themselves rather than health activities in the community are expensive to operate and no longer relevant. They should be exchanged for more suitable services identified by the local or district health committees. If church groups remember why they are operating the institutions, they will concentrate on contributing to the decision-making of health committees rather than the survival of outdated services. (AC)

- 1460 Hendrata, L.** *Model for community health care in rural Java*. Contact (Geneva), 31, Feb 1976, 1-7. Engl. 10 refs.

An evaluation of the operation and utilization of the Emmanuel Health Centre, Central Java, Indonesia, revealed that after 2 years the centre was not eliciting the community response its founders had envisioned. Rather, the centre was being used by those within its immediate vicinity and those who comprised the higher economic and educational strata; economic development and agricultural improvement were considered more important than health by the community at large; and there was little community participation in solving health problems. A new programme strategy based on a philosophy of health care "by" rather than "for" the

people was then devised and translated into a working model in the village of Klampok. Primary care was delivered by "cadres," volunteer health workers chosen by the villagers, trained in problem solving and responsible for a small unit of 15 households each. A village health insurance scheme, in addition to paying for health care and health-related activities, provided a forum in which health and general development issues could be discussed. The role of the professional staff in this new setup was one of "stimulating and enabling" the community to recognize and handle its own health problems. The author feels that with proper leadership, the Klampok model could be successfully replicated in other localities. (HC)

- 1461 Herz, B.K.** USA, Agency for International Development, Department of State. *Integrating health and family planning services*. War on Hunger (Washington, D.C.), May 1976, 13-15. Engl.

A basic problem in developing countries is how to improve health conditions and contain population growth. A possible solution is an integrated approach to health services at the local level and to development planning at the national level. At both levels, this approach promises that resources, i.e., personnel, facilities, and money, can serve more than one function and thus be more effective. (AC)

- 1462 Hocking, B.** *Health problems and medical care in Papua New Guinea*. International Journal of Epidemiology (Oxford), 3, Mar 1974, 9-13. Engl. 36 refs.

A brief overview of the major medical problems and health services of Papua New Guinea reveals the following facts: an overall growth rate of 3% per annum, with 45% of the population under the age of 15; pneumonia the leading cause of mortality and hospital-bed occupancy; malaria highly endemic to coastal areas; tuberculosis widespread, accounting for 20% of hospital-bed occupancy; and childhood protein-calorie malnutrition an emerging problem in urban areas. Relatively large amounts of money — 10% of the national budget or \$7 per person in 1972 — are devoted to health with missions constituting an additional source of health capital. Services are delivered by three types of auxiliary/paramedical worker: the health extension officer, who is responsible for running the health centre and heading the health team; the nurse, who is increasingly responsible for primary care involving both diagnosis and treatment; the aid post orderly, who dispenses curative medicine and supports preventive programmes. A move toward further individual and community responsibility in health care is indicated. This paper, while informative in its own right, constitutes a valuable reference source to material on health conditions in this and other developing countries. (HC)

- 1463 Hurlburt, W.B.** *Health care programs for scattered populations*. Public Health Reviews (Tel Aviv), 4(3-4), Jul-Dec 1975, 297-325. Engl. 40 refs.

Health care for scattered populations is discussed. An optimal system applying current technology is described emphasizing the economic supportability of such a system. This is accomplished by basing the system on health auxiliaries and middle level health personnel who have undergone problem-oriented training and who receive regular supervision. The Alaska Native Health Program is described in detail, and several other health care systems in use in sparsely populated areas of the world are reported on. Emergency care as a particular and essential aspect of any health care programme for isolated populations is discussed. Finally future trends including current experiments utilizing satellite technology are reported on. (Modified author abstract.)

- 1464 Iran, Ministry of Health.** *Development and current health status in Iran*. Journal of the Egyptian Medical Association (Cairo), 54, 1971, 850-858. Engl.

The health minister of Iran briefly reviews the history of health services in that country during the 20th century and comments on the aims and accomplishments of the Fourth Five Year Plan. Although Iran first attempted national development planning in 1937, the beginning of the present approach to health services planning was in 1962. Since then, the establishment of clinics, rural health centres, hospitals, schools of health manpower, and the Health Corps — mobile health units serving rural areas — has greatly improved coverage. Elements of the current (1971) programme include emphasis on family planning, maternal child health, and sanitation. The government has made loans available to private organizations to encourage extragovernmental interest in health services, and medical care insurance has been extended to many employed individuals. A Medical Care Planning Council, which represents all groups responsible for health care, has been initiated to oversee the distribution of health services. (AC)

- 1465 Kaul, P.M.** WHO, Geneva. *Study of basic health services in Uganda*. Geneva, WHO, 1970. 42p. WHO/CSS/70.1. Engl. 29 refs.

A WHO consultant reports his observations of Uganda's health services and recommends changes. He comments that the major health problems are malaria and respiratory tract infections, including tuberculosis. Parasitism such as schistosomiasis, trypanosomiasis, and onchocerciasis is widespread, despite water supply and sanitation programmes. The organization and administration of the health services is divided at the national level among the Ministry of Health, the Ministry of Regional Administration, and the Ministry of Planning and Economic Development. Although the Ministry of Health is responsible for developing health policies and for providing staff to all hospitals and training centres, the Ministry of Regional Administration provides funds for peripheral health services and the Ministry of Planning and Economic Development is responsible for drafting long-term plans in all sectors of development. Health services in the rural areas are provided at

dispensaries, subdispensaries, and aid posts; although present numbers of health facilities are inadequate, development plans include construction and staffing increases. Most training for health personnel has been modeled on British programmes and takes place primarily at the Makerere medical school, nurses training school in Kampala, school of hygiene in Mbale, and the school for medical assistants also in Mbale. Tables illustrate the distribution and financial aspects of the health services, and annexes 1-10 provide statistical and graphical representations. (AC)

- 1466 Kingma, S.J., McGilvray, J.C.** *Interchurch cooperation in national health care programmes.* Contact (Geneva), 26, Apr 1975, 2-3. Engl.

This issue of *Contact* is devoted to interdenominational cooperation, and cooperation between church and government in the field of health care in developing countries. Advances realized in Malawi are cited as examples of what can be accomplished through such cooperation. They include the development of uniform administrative practices, greater sharing of personnel, the establishment of supervision and referral systems, and the unification of priorities, all of which have served to extend health coverage. Although the advantages of cooperation are generally recognized, factors that tend to frustrate it still exist. These were aired at the Third Conference for Coordinators of Church-related Health Work in Africa, whose intent was, broadly, to discover the most urgent health care priorities for the churches and to see how coordination of effort among themselves and with governments could contribute to planning. Among the statements included in the position paper of the conference were the following: African coordinators (to replace expatriates) should be recruited within 1 year; existing hospitals should be refashioned to come within the scope of locally available funds and personnel; and future health programme development should be based on use of available resources (including auxiliary health workers) to provide basic health care. (HC)

- 1467 Lasserre, R.** *Protection de la communauté plutôt que soins médicaux individuels. Un essai de médecine raisonnée en milieu rural tropical. (Protection of the community instead of individual health care. A study of adequate medicine in a rural tropical environment).* Bulletin Schweizerische Akademie der Medizinischen Wissenschaften (Basel), 30(4-6), Oct 1974, 210-218. Fren.

After a description of the state of health in the country districts of subtropical and tropical underdeveloped lands, the author discusses *in extenso* the problem of polluted water, which is responsible for 50% of admissions to hospital in tropical regions, and the danger for the third world of a sudden demographic spreading. He shows that the programmes of public health do more for the development and progress of communities than does individual medical care. Such programmes seem a more "reasonable" form of medicine than that of the modern expensive and sometimes anachronistic clinical medicine. Nationwide public health service to

improve hygiene and coordinate the planning of sanitary measures provides a more adequate and logical answer to the needs of the communities involved. There is a lack of qualified doctors to carry out such sanitary services, and the author advocates the introduction of courses in specialized tropical public health in one of the Swiss universities. Young doctors could be trained there to meet the specific needs of the underdeveloped countries, provided the Swiss technical union is interested in the programmes of public health in the third world. (Modified journal abstract.)

- 1468 Levey, S., Loomba, N.P.** *Health care administration: a managerial perspective.* Philadelphia, Pa., J.B. Lippincott, 1973. 603p. Engl. Rcfs.

The objective of this textbook is to present health administrators with a combination of concepts, tools, and techniques that will assist them in the efficient management of health care organizations and programmes. The book is also intended for use in management-oriented health courses at graduate and undergraduate levels, and as a reference work for health professionals who are committed to improving the organization and delivery of health care. It is divided into five sections: the framework of health care systems, decision-making, planning, evaluation and control, and management science models — evaluation and application. Each of these sections contains a number of chapters on subthemes, supplemented by selections of previously published articles. Although the book is primarily concerned with health care in the USA, many of the concepts and methods discussed are still generally applicable to less sophisticated health systems in other countries. (MPM)

- 1469 Macdonald, G.** *Development of health services in tropical countries.* Acta Tropical (Basel), 20(3), 1963, 269-278. Engl.

In a lecture given at the Swiss Tropical Institute in 1963, a professor of hygiene and tropical medicine surveys the development of health services in tropical countries and suggests future changes. He discusses problems of sanitation, infant mortality, and morbidity in the context of the development of medicine and public health in the Western world and indicates the necessity for educational, economic, and political support for providing good health care. Mass campaigns and individual research into the causes and cures of tropical diseases are short-term measures, and in the long run, the medical community must become involved in environmental services, equating preventive health with curative care. Auxiliary personnel can provide valuable support in these undertakings, but they require more direct supervision and continual reeducation courses. This means more doctors are needed, and to increase the numbers of physicians available, new curricula must be devised to graduate general practitioners in a shorter time. Clinics, health units, and hospitals should be coordinated to provide the most effective and most widespread care possible. The need for international aid in establishing these health services, providing manpower, and continuing research is emphasized. (ES)

- 1470 Mahmud, S.H.** *Health services in Pakistan.* World Hospitals (Oxford), 6(1), 1970, 16-25. Engl. 10 refs.

When India was partitioned in 1947 and Pakistan gained independence, mass migration between the two countries resulted. While many farmers, artisans, and labourers entered Pakistan, many of the Hindu and Sikh doctors and allied health professionals emigrated. This migration seriously strained the already meagre health services, and three national health conferences were held in 1947, 1951, and 1960 to deal with the overwhelming health problems. The plans that emerged from those conferences provided a step-by-step progression toward medical care for all. The Ministry of Health, Labour, and Family Planning was established and its health division given power to coordinate health development, although much of the responsibility for health services was delegated to provincial authorities. The provinces, which were divided into regions and districts, became the base for preventive as well as referral services. District health officers were chosen to direct these services and to head state-owned hospitals, which now provide free medical care. Although there are no firm data for health manpower, present health service problems can be traced partially to the shortage of all paramedical and nursing personnel. Over the past few years, however, more training centres have been established, and at present there are 12 medical colleges and 27 schools of nursing in the country. Courses, which range from 1 to 4 years, are also available for all types of paramedical cadres. (AC)

- 1471 Malcolm, L.A., ed(s).** Papua New Guinea. Department of Public Health. *Role of the hospital and its relationship to the community.* Konedobu, Papua New Guinea, Department of Public Health, 5-9 Nov 1973. 47p. Engl.

The hospital system in Papua New Guinea is examined to see what administrative changes would improve its efficiency and exploit its potential. One proposal is for hospitals to absorb some of the independent community services (tuberculosis, leprosy, etc.) and take responsibility for the health of the districts they serve; other recommendations include the following: budgetary decentralization, whereby each hospital administers its own finances; standardized management, admission and discharge criteria; more judicious allotment of specialist care; greater responsibility for nurses in diagnosis, treatment, and management of patients in the hospital, etc. Principles underlying these recommendations are that hospital facilities should serve all people and that they should reflect standards appropriate to a developing country. Reports on levels of inpatient care, hospital and district financing, and diagnostic radiology are appended. (HC)

- 1472 Mann, K.J.** *Hadassah's pioneering role in community health services.* Jerusalem, Hadassah Medical Organization, n.d. 20p. Engl. Unpublished document.

In Israel, community medicine and its complement in medical education have steadily evolved since 1918, and early preventive and promotive efforts have developed into separate networks with particular targets, such as the pregnant mother, the infant, the school child, the sick adult, etc. In 1950, these separate services were combined to bring integrated health care to the family as a unit through a health team comprising a doctor, nurse, social worker, and community health worker. To orient staff in the team approach, the family and community health centre in Kiryat Hayoval was established in 1953. Kiryat Hayoval's programmes, which have been devised for the training of the medical team include a full, 4-year residency programme for the family doctor, whose curriculum is outlined in some detail. Expressed satisfaction on the part of the population and statistical evidence indicating improved health prompted the opening of 12 more family and community health centres throughout "Jerusalem and the Corridor." (HC)

- 1473 Mavros, P.M., Taylor, D.M., Davies, J.C.** *New thoughts for old.* Central African Journal of Medicine (Salisbury, Rhodesia), 19(10, 11, 12), Oct-Nov-Dec 1973, 11p. Engl.

Basic health services can be provided to all Rhodesians without increased cost if the health care delivery system makes more effective use of present resources. Changes that are recommended to achieve this include introduction of a central agency for disease control; an information network between central, district, and local health care providers; and a modified health infrastructure. The central agency for disease control would plan mass campaigns, record and maintain disease statistics, and evaluate control programmes. The information network would ensure that results obtained by the central agency were passed on to the periphery. The present health infrastructure would be modified so that medical assistants acquire adequate training to manage primary care at the local level. Medical assistants then could screen all patients and refer to hospital only those who require it. (AC)

- 1474 McGilvray, J.C.** *Health services and health manpower for the developing countries.* World Hospitals (Oxford), 6, 1970, 1-4. Engl.

The author, director of the Christian Medical Commission of the World Council of Churches, raises some questions about the influence of Western medical values and practices on health care delivery in developing countries. He points out that in spite of their cost, inaccessibility, and inappropriateness, hospitals are the central feature of many national health systems. As a result, undue emphasis is placed on the episodic, specific treatment of individual patients rather than large-scale prevention of disease. Decentralization of existing facilities is required, together with rapid expansion of middle-level health workers. However, this introduces another problem — health manpower status. Many developing countries feel that greater use of auxiliary health workers would indicate a second-class type of medical care and is, therefore, unacceptable, even

though experience has shown that physicians exert very little influence on rural health. Developing countries must experiment with new systems for health care delivery that have been tailored to suit their own individual requirements and resources; this will entail a reassessment of whether health services should cater primarily for the individual or for the community as a whole. (MPM)

- 1475 Mikho, E.** *Health services in Iraq and the problems and factors affecting their provision.* World Hospitals (Oxford), 8, 1972, 288-294. Engl. 8 refs.

Iraq is a developing country, although its ties with civilization date back to ancient Mesopotamia. Its 438 466 km² include mountains, desert, marshland, and an alluvial plain. Approximately half its inhabitants live in the rural areas where illiteracy, harmful traditions, and fear of change are widespread. The health services for these people are provided in local dispensaries by dressers and health assistants. All the dispensaries within a district or subdistrict are responsible to a medical officer who, in turn, provides a link with the national decision-makers — the Ministry of Health. More than 90% of the physicians in private practice in Iraq are located in three large urban centres, and this maldistribution extends to all health services and manpower. To rectify manpower shortages, the ministry has introduced a scheme by which all medical graduates must enter 3 1/2 years compulsory service. It has also established new training centres for nursing, etc., but potential students are difficult to recruit. Not only is there a limited pool of persons who have adequate basic education, but caring for the sick is viewed as menial labour and tradition prevents women from entering the public work force. Statistical data, which depict Iraq's demography and health manpower to population ratios, are presented in tables and figures. (AC)

- 1476 Mojekwu, V.I.** *Problems of rural health care delivery in Nigeria.* Nigerian Nurse (Lagos), Apr-Jun 1975, 6-16, 20. Engl. 22 refs.

The author briefly reviews the different institutions and categories of health worker involved in the provision of health care in rural Nigeria and then describes the constraints under which they must operate. This extensive list of constraints includes the inadequate facilities provided by the Ministry of Health, lack of organization and policymaking, inactivity of other government departments (e.g., agriculture, community development, roads), and poor preparation of staff, especially related to the sociocultural environment in which they are to work. These constraints will not be removed by material means alone; they will require a reorientation of health planners to make radical changes in the health care delivery system. At the same time, some thought should be given to the consequences of improved health care — more attention should be paid to child spacing in particular, and health education in general. (MPM)

- 1477 Newell, K.W., ed(s).** *Health by the people.* Geneva, WHO, 1975. 206p. Engl.

Individual articles have been abstracted separately under entries 1431, 1452, 1456, 1478, 1489, 1634, 1732, and 1759.

This compilation of articles describes the health care systems in China, Cuba, Tanzania, and Venezuela. It also reviews specific projects in Guatemala, India, Indonesia, Iran, and Niger. The element that all these articles have in common is participation by the population served. All the authors examine methods of providing health care to rural inhabitants, "... and their outlook has been properly conditioned by both the good and the bad experiences they have passed through." (AC)

- 1478 Nugroho, G.** *Community development approach to raising health standards in Central Java, Indonesia.* In Newell, K.W., ed., *Health by the People*, Geneva, WHO, 1975, 91-111. Engl. See also entry 1477.

By enlisting village cooperation in health planning through the formation of "community development teams," the author and his wife were instrumental in realizing various community development programmes in villages throughout Java, Indonesia. One community development team in Begajah introduced new agricultural measures (rice strains, fertilizer, etc.) that, within a year, raised food production and consequently eliminated under-five malnutrition; another, in Sumberlawang, raised the average family's income by 30% through the organization of a goat cooperative. A proposed medical care scheme (called *dana sehat* or "health fund") was introduced, again with village cooperation; a monthly fee of 5 rupees — 0.5% of the average monthly income — entitled the member to free medical examinations and prescriptions. Soon the village was financing 46% of the total cost of its health care through the health fund. The scheme was repeated in other villages, and its members now number 5 000. The author concludes that community development activity is the key to raising rural living standards, and he has begun training young doctors and nurses in what he calls the "community development approach." (HC)

- 1479 Pakistan, Ministry of Health and Social Welfare.** *Annual report of the director general health, Jul 1971-Jun 1972.* Karachi, Ministry of Health and Social Welfare, 1972. 101p. Engl.

The 1971-1972 annual report of the Director General Health (Pakistan) is an extensive compilation of facts and figures on a wide range of subjects. There is epidemiological information on quarantinable diseases and on the progress of the malaria and tuberculosis eradication programmes. There are reports of the activities of provincial health departments, various medical institutions, and some private and voluntary medical organizations. Statistics are presented on the availability and utilization of medical facilities and on the numbers of professional and auxiliary medical personnel being trained. Other chapters deal briefly with international

cooperation in health, medicines legislation, and the estimated budget for 1971-1972. (MPM)

- 1480 Prasad, B.G.** *Structure and functions of rural health team in India.* Indian Journal of Medical Education (Bombay), 11(2-3), Apr-Sep 1972, 121-126. Engl.

The primary health centre in India is the instrument designed to deliver comprehensive health care to the rural community. Its staff ideally comprises many individuals working as a health team. The functions of these individuals, i.e., the medical officer-in-charge, the pharmacist, the laboratory technician, the sanitary inspector, the basic health worker, the extension director, the health visitor, family planning worker, the auxiliary nurse-midwife, etc. are defined in this article, and the formal interpersonal relationships between them are outlined. Also outlined is the relationship with the public in respect of the services rendered. The village health committees and the Khestra Saint are also mentioned. (Modified author abstract.)

- 1481 Puerto Rico, Department of Health.** *Informe anual. (Annual report).* San Juan, Puerto Rico, Department of Health, 1972. 102p. Span.

The annual report of the Department of Health of Puerto Rico comprises an organizational chart of the department and progress reports from the assistant secretaries of medical and hospital services; environmental health and consumer protection; preventive medicine; maternal and child health; mental health; and administration. Data are graphically represented and include information on mortality, morbidity, birthrate, expenditures, and utilization rates for health services. (AC)

- 1482 Raghu Ram, N.V.** *Health administration and policy development: the case approach.* Hyderabad, India, Ramalakshmi, Feb 1971. 84p. Engl.

Three cases, all considered "milestones in the field of health administration," are cited to demonstrate problems related to health administration and policy development in India. The first, in Paschim Pradesh, illustrates the problems of translating a government directive into concrete programmes through existing administrative machinery. The second demonstrates the difficulties of transferring the mechanisms of a mass campaign to existing permanent agencies; this example is taken from experience with the national malaria eradication programme. The last case, in which a clinical family planning programme switched to a target-oriented policy, presents another view of administrative upheaval. The origin, definition, and usefulness of case studies in policy implementation and administration are also discussed. (HC)

- 1483 Ramakrishnan, N.R., Sen, P.C., Rao, D.R.** *Growth of a rural health centre through community health service.* Your Health (Calcutta), 18, Jul 1969, 196-203, 207. Engl.

The various training, research, and service activities conducted by the rural health unit in Singur, India, are outlined in some detail. These include maternal and child health services, a school health programme, public health education, the formation of "village health committees," communicable disease control, public health laboratory services, and training for auxiliary and professional personnel. The school health programme makes use of a new category of health personnel, the "hygiene-trained teacher," and the communicable disease control relies upon a considerable amount of community participation in discovering and combating disease. The author concludes that, in its 3 decades of operation, Singur has succeeded in providing students with a near-ideal demonstration of comprehensive health care in action and will probably continue to do so. (HC)

- 1484 Ramirez, H., Gartner, H., Rizo, A., Lasprilla, J., Gomez, L.C.** Colombia, Ministry of Public Health. *Redesign of the national health system: preliminary proposal for an organizational and functional profile of the health system.* Bogota, Ministry of Public Health, 17 Apr 1973. 39p. Engl.

The health sector of Colombia is managed at the national, sectional, and regional levels. At the national level is the Ministry of Public Health, which directs, coordinates, and evaluates health services at the sectional and local levels. The sectional level includes services in departments and territories. It adapts national standards and policies to the customs and realities of the people it serves, and it coordinates and oversees local institutions. The local level enlists community participation and monitors its own services. The interdependence among levels, the regionalization of services, and community participation ensure proper functioning of the system. The financing comes from diverse sources and is divided according to legal norms and institutional convenience. The Ministry of Public Health distributes funds that originate from the national budget and external sources; the ministry may appropriate funds for either sectional or local programmes. The departments at the sectional level also receive monies from the national income through fiscal allowances and taxes on betting and beer. The departments distribute some of these funds to programmes at the local level. Other monies available to local management come from municipal budgets, individual fees, and community contributions. Diagrams accompanying this article illustrate the structure, interdependence of levels, and the methods of financing. (AC)

- 1485 Segovia, M.** Pan American Health Organization, Washington, D.C. *Management of health services in the Commonwealth Caribbean.* Bulletin of the Pan American Health Organization (Washington, D.C.), 10(1), 1976, 25-32. Engl.

Putting aside the very substantial gains made in recent years by health services of the Commonwealth Caribbean, this article reviews the administrative problems

faced by those services. For the most part, these problems appear to have two main sources: weakness of the colonial heritage and greatly increased popular demands following the attainment of associated or independent status. In general terms, there are a great many current needs. In many cases, for example, it would help to give more attention to identification and delineation of specific health problems, to make more extensive use of planning, to update existing legislation, to establish a better information system, to revise the budget classification system and loosen budgetary controls, to improve supply management, to define areas of official responsibility, to reassert individual responsibility for decision-making, and to streamline administrative channels. All in all, the problems faced by the health services make it imperative to reexamine the possibilities for implementing administrative reforms. It is felt, however, that besides being addressed to current problems, such reforms should be designed to help the health service cope with any new situations that may arise — before such situations can threaten its vital contribution to social and economic well-being. (Journal summary.)

- 1486 Seham, M.** *American doctor looks at 11 foreign health systems.* Social Science and Medicine (Oxford), 3(1), 1969, 65-81. Engl. 61 refs.

Summaries in French, Spanish, and German.

Health care as a right of every individual has been recognized in many countries; however, governments have varied in their willingness to accept responsibility for providing health services. Great Britain, Sweden, Norway, France, West Germany, Switzerland, Austria, Denmark, Holland, New Zealand, and Australia all have instituted some form of national health programme, and these systems belie the argument that socialized medicine leads to poor quality care and destroys the initiative and freedom of physicians. Each system combines elements from the three primary methods of paying doctors — salary, fee-for-service, and capitation — and the different forms of reimbursement are detailed in the article. Financing for the services is primarily through general taxation; some are funded through national social security funds, whereas in other systems local governments share financial support. Tables summarize the health systems and methods of funding described in the text. (AC)

- 1487 Selden, M.** Institute for Policy Studies, Health Policy Advisory Center, New York. *China: revolution and health.* Health/PAC Bulletin (New York), 47, 1972, 2-18. Engl. 30 refs.

Since the Great Leap Forward in 1958 and the Cultural Revolution of 1966, the People's Republic of China has depended on mass-line techniques to shift the emphasis and improve the effectiveness of its national health system. The mass-line approach refines the disorganized ideas of the masses into practical, workable policies that can be implemented by and for the masses. Mass-line campaigns have successfully eradicated syphilis

and opium addiction and are presently being used against smallpox, cholera, plague, kala-azar, schistosomiasis, and various pests and hazards of environmental sanitation. In addition to the increased emphasis on mass campaigns, cooperation between Western and traditional practitioners of acupuncture and herbal medicine, in particular, is also being stressed. Another priority of the present health system is supplying health services for the workers, peasants, and soldiers. This priority has been met by the training of barefoot doctors who now number more than 1 million. They provide basic medical, and especially preventive, services to their brigades, and now more than 70% of the rural population is protected by cooperative health care systems, which are also being introduced in the cities. These services and personnel combine to form the system's infrastructure, which resembles a pyramid; at each level, health care personnel train and support the members of the level below. (RD)

- 1488 Sidel, V.W.** *Medical care in the People's Republic of China.* Archives of Internal Medicine (Chicago), 135(7), Jul 1975, 916-926. Engl. 9 refs.

In just over 25 years, the health services in the People's Republic of China have successfully controlled the diseases that are rampant in most developing countries — malnutrition and infectious diseases. They have accomplished this task through the efforts of the entire population based on four main principles: health services should serve the workers, peasants, and soldiers; preventive medicine should be stressed; traditional Chinese medicine should be merged with Western medicine; and health work should involve all people. The principle of learning by doing has been introduced into training for all levels of health workers, and educators concentrate on demystifying medical knowledge so that each person understands the contribution he can make to improved health services. Perhaps one of the greatest challenges has been the integration of traditional and Western medicine. The traditional practitioners possessed a compendium of effective therapies, but they relied on many concepts, such as the theory of Yin and Yang, that proved unacceptable to the philosophy of socialism. The separation of the valuable from the superstitious elements was difficult, but the effect has, in some ways, surpassed the therapies of the Western developed countries. (AC)

- 1489 Sidel, V.W., Sidel, R.** *Health care delivery system of the People's Republic of China.* In Newell, K.W., ed., Health by the People, Geneva, WHO, 1975, 1-12. Engl. 16 refs.

See also entry 1477.

Prior to 1949, the health services in China were extremely limited; the crude death rate was about 25 deaths per 1 000. In the 1930s and 1940s Mao Tse-tung and his People's Liberation Army began encouraging members of Kiangsi and Shensi provinces to educate

themselves and to provide their own medical care services. When Mao assumed power in China, he expanded these principles to the national level, proclaiming a health policy based on prevention, accessibility, and mass participation. He also called for the integration of Western and traditional forms of medicine. People in the communities were mobilized to perform health-related tasks, and an extensive family planning programme, which is supported largely by volunteers, was introduced. After the Great Proletarian Cultural Revolution (1966-1969), medical school admission policies and curricula were revised and made more practical. Medical practice itself changed, and a rotation system went into effect, whereby, at any given time, one-third of urban health workers must practice in rural areas. Part of their responsibility was to train barefoot doctors who now provide most of the primary medical care. The counterpart of the barefoot doctor in urban centres is the worker doctor who practices in factories, etc. These auxiliaries have contributed significantly to reduced mortality; however, the mobilization of the whole society has probably been the most influential element. (AC)

- 1490 Smith, P.T.** *Medical services in the British Virgin Islands.* International Journal of Health Services (Farmingdale, N.Y.), 2(1), Feb 1972, 111-118. Engl.

An outline of the geography and history of the British Virgin Islands precedes a review of the present state of medical services in the islands. The collapse of the West Indian plantation economy following emancipation of slaves was followed by a regression to a peasant economy lasting almost a century. The existing political system, financial resources, capital developments, and external aid form a background to the medical services provided. The small, independent population of 10 500 has all the needs, requirements, and demands of many larger states. Services are heavily subsidized by government and coexist with private medical practice. Although the ratio of medical staff to patients is low, a variety of services are provided, especially in public health, maternity care, and child welfare. Some surgery is performed in the islands. A reasonable spectrum of laboratory services exists and is associated with a small blood bank. Environmental sanitation is at an early stage of development but mosquito eradication and garbage and sewage disposal are receiving increasing attention. The future of the medical programme depends on efficient financing, economic use of staff, and the reduction of private medical care. The service requires patience and commitment but is a challenging situation for the doctors. (Journal abstract.)

- 1491 Srouji, E.** *Health services in the rural areas of Lebanon.* Lebanese Medical Journal (Beirut), 23(4), 1970, 395-402. Engl.

The author, a physician who has practiced for more than 20 years in the rural areas of Lebanon, presents his impressions of the shortcomings of the health services and offers ways of remedying them. According to him, the few hospitals available in rural areas are

plagued by staff deficiencies in numbers and quality, and none have outpatient facilities. Ambulatory care is provided in dispensaries, which totaled 240 in 1964. These dispensaries are characterized by insufficient mechanisms for supervision and referral, and it is estimated that 60-70% of their operational funds are spent for drug purchases and for the salary of a part-time physician. Little time or money is spent on preventive medicine. Solutions to these shortcomings are possible, but they must be financially realistic and they must cover the widest audience possible. A rational plan is for every village to provide and maintain a "locale" consisting of two rooms of any design or structure. The ministry of health would then only need to employ and supervise a public health nurse who would direct 15-20 locales. The duties of the nurse would be to make 1-day visits to locales. Half the day could be allotted to maternal child health and the other half to care of chronically ill patients and those convalescing after hospitalization. The nurse would be the much-needed link between acute care and restored health. The nurse's responsibilities, however, would demand changes in present nursing curricula and in remuneration. Some legislative changes would also be required; these include more liberal family planning laws, regulations for centralized registration of births and deaths, compulsory elementary education for girls, and enforced immunization. (AC)

- 1492 Trishnananda, M.** *Present situation of medical care and health services in the rural communities of Thailand.* In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 43-45. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See entry 1519 for complete proceedings.

A brief discussion of demographic and epidemiological data from Thailand is followed by a summary of the country's rural health services. Overall, there is 1 doctor for approximately 7 000 people, but the urban concentration of doctors means that there remains only 1 doctor for 110 000 people in the rural areas, where 85% of the population lives. Health services for the rural people are provided through a network of peripheral health units. There are 241 health centres at the district level, each serving a population of not less than 30 000, 946 health subcentres at the village level, and at the hamlet level there are about 1 494 of the smallest health units — the midwifery stations. The staffing and activities of each of these three types of peripheral health unit are outlined. (MPM)

- 1493 Vachrotai, S.** *Lampang project, an alternative approach to rural health care in Thailand.* Assignment Children (Geneva), 33(1), Jan-Mar 1976, 88-95. Engl.

Outlined in this paper are the aims and design of the Lampang Project, which has been introduced into a rural area of Thailand to develop, improve, and extend the existing health services. The overall goal is to establish a low-cost, coordinated health care delivery system that will improve the general health of the target population. More specifically, the project's main priorities are maternal and child health, family planning, and nutrition. The paper describes how the links between the provincial hospital and the network of peripheral centres have been strengthened, and how new categories of health personnel ("paraphysicians") have been introduced to help make the range of services more appropriate and more accessible. To extend the system further and to encourage even greater utilization, cadres of volunteers have been recruited (health post volunteers, indigenous midwives, communicators), and to provide community support and feedback on the reorganized health services, the project has encouraged the formation of village advisory committees. The project is expected to run for 8 years, and an ongoing evaluation will enable the government to adapt the project's components for expansion to the rest of Thailand. (MPM)

- 1494 Vukmanovic, C.** *Decentralized socialism: medical care in Yugoslavia*. International Journal of Health Services (Farmingdale, N.Y.), 2(1), Feb 1972, 35-44. Engl.

The health care system in Yugoslavia is based on the principles of reciprocity and solidarity, as regulated by constitutional provisions that guarantee medical care and use of health services as the basic right of all citizens. Medical care is organized according to needs and resources. Its funds are generated through contributions that are accumulated into social insurance funds for reimbursement of health institutions. Coordination among health institutions, associations of social insurance, and sociopolitical and other concerned organizations is regulated by law. Insured persons decide on the extent of medical care to which they will subscribe and on all rights emanating from the insurance. There are several reimbursement mechanisms such as fee-for-service, capitation, and salary. Insured persons through their associations influence the administration of social insurance by specifying priorities and by deciding on specific contracts with health institutions. The emphasis in contracts is placed on preventive services, home care services, and dispensary care, for which health institutions proportionally receive more money than they do for hospital services. This arrangement influences the pattern of organization of health institutions and health workers. A new type of institution that integrates prevention and cure is the medical centre. (Modified journal abstract.)

- 1495 WHO, Alexandria.** *Report on the seminar on health services in rural areas, Tunis, Tunisia, 7-16 Oct 1968*. Alexandria, WHO, 1968. 20p. Engl.

A seminar held in Tunisia in 1968 recognized the plight of rural peoples and recommended changes in manpower training, supervisory setups, and rural health

delivery systems. Participants attended five plenary sessions and discussed, among other things, the present state of rural health services and alternatives, such as the health corps in Iran, Rural Health Foundation of Iraq, medicosocial action centres in Algeria, and sanitary engineer training in Turkey. Recommendations were that development plans include a provision for expanding rural health services; that, generally, peripheral services should comprise a health centre to serve 15 000-20 000 people, rural health units to serve 5 000, and branch facilities staffed by auxiliary health staff and visited regularly by a doctor; and that means for supervision, communication, and transportation be established. Also suggested were incentives for health personnel to practice in rural areas; these included pre-service training in rural areas, fair and just assignments for work in rural areas, adequate remuneration and living accommodation, equal opportunities for postgraduate study and for promotion, and provision of up-to-date manuals of instruction, etc. Seminar reports and background data are appended. (AC)

- 1496 WHO, Geneva.** *Health care in rural areas*. WHO Chronicle (Geneva), 30, Jan 1976, 11-17. Engl.

With a backdrop in rural Africa of high illiteracy, 4% economic growth, shortage of health manpower, and total lack of transport and communications, governments must reshape health systems that were left by colonialists. A network of health services should be established that coordinates present services; this could be based on graduated levels of care available respectively from the dispensary, the rural health centre, rural or district hospital, specialized hospital, and the university hospital. When establishing priorities for the facilities, however, health planners should note that the lack of transportation drastically limits the catchment area of all health facilities and that care in a dispensary costs half that of rural health centre care, which in turn costs 40-100 times less than hospital care. Efforts should be made to integrate traditional practitioners into the network and to teach villagers simple methods of recognizing health problems and remedying them. Niger and Tanzania both have introduced new approaches to health problems. In the former, since 1966, village health teams, composed of two volunteer health workers and one traditional birth attendant, have provided important links between rural peoples and existing health services. In the latter, the Tanzanian government has supplied materials, equipment, and expertise to villagers to encourage them to build their own latrines and water supplies. (AC)

- 1497 WHO, Geneva.** *Health education: a programme review*. Geneva, WHO, 1974. 78p. Engl. 109 refs.

The World Health Organization has long recognized the value of health education; in 1949, it established a health education unit whose objectives were to enlist public participation in development programmes that affect health and to promote improved systematic planning, implementation, and evaluation of the health

education components of the organization's programmes. Since then much attention has been devoted to the former objective; however, the health education aspects of many programmes have not been planned, applied, or supported on a sustained basis. It is pointed out, therefore, that more emphasis must be placed on the latter objective, because the two are interrelated. Outlined are WHO's activities and the role of health education in the fields of family health, nutrition, environmental health, health manpower development, disease control, and school health programmes. Appended are practical applications in Panama, Nigeria, Philippines, Surinam, and India; present support for research projects; and meetings on health education. (AC)

- 1498 WHO, Geneva.** *Working group on training for supervision.* Geneva, WHO, Jul 1973, 12p. WHO/EDUC/73.169. Engl.

The objectives of this study by a WHO working group are to identify tasks of supervision for members of the health team and to design guidelines for training in supervision. For the purposes of the study, supervision is defined as the element, at all levels of management, that seeks to make the best use of human efforts in the health services. Although personalities determine the methods of supervising, there are certain conceptual, technical, and interpersonal skills that must be practiced. Training in these skills should take place in the work setting and should be practical. The tasks and activities of supervisors at the central, intermediate, and peripheral levels are listed under the headings: planning; management and development of staff; organization, control, and use of materials; and coordination, communication, human relations. The working group recommends that supervisory training be given to all levels of managers, that continuing education supervision be offered, that appropriate locations for training be identified, and that WHO develop training guidelines, compile information, and provide mobile teaching-consulting teams to assist institutions in organizing courses in supervision. Appended are a glossary of terms and a list of participants. (AC)

- 1499 WHO, Manila.** *Rural health and community development in the Eastern Mediterranean region: Tunisia.* Manila, WHO, 18 Sep 1962, 8p. WHO/EM/RC12/9 Add.1. Engl.

This document summarizes Tunisia's response to a questionnaire sent out by the WHO office in Manila. The questionnaire sought data on rural health and community development and covered the areas of population and vital statistics, housing, environmental sanitation, morbidity, general information on rural areas and rural economy, government activities at the national level aimed at promoting rural health, village health cooperatives, health units in rural areas, social centres, basic education and school health in rural areas, and health education of the public. (RD)

- 1500 Williams, C.D.** *Organisation of child health services in developing countries.* Journal of Tropical Pediatrics and African Child Health (Kampala), Jun 1955, 3-8. Engl.

Health services for mothers and children should be coordinated and should reflect the needs of a country. They should include health and nutrition education, follow-up care, and home visiting and should incorporate traditional medicine wherever possible. In addition, since their patients often face transportation difficulties, which discourage attendance, they should offer both curative and preventive medicine. Special children's clinics and hospital wards would facilitate epistemological research into childhood diseases and offer opportunities for field experience to medical trainees. Child health should be considered an essential but separate component of national and local health programmes. (RD)

- 1501 Williams, V.** South Pacific Commission, Noumea. *Commissioning new hospitals and other health service units.* Noumea, New Caledonia, South Pacific Commission, Information Document No.29(1972), Jan 1973, 1v.(various pagings). Engl.

The director of a new health facility must oversee certain administrative activities between the time a building is constructed and the time it is opened for public use. These constitute commissioning and should follow a timetable that is as short as it is realistic. Elements in the timetable include organizing storage of new equipment and furniture, orienting staff to their new duties and environment, planning facility maintenance schedules, arranging transport systems for employees and patients, coordinating volunteer aid and gifts, installing equipment, stockpiling supplies, and publishing an information booklet. The last should detail outpatient and inpatient services, visiting times, fees, and what to bring to the facility in case of admission. The opening of the facility should be marked by a formal ceremony. Checklists for administrators are appended. (AC)

- 1502 Wood, C.H.** *Who helps the doctor? Health team in Africa.* Update (London), 9(9), 1974, 1209-1218. Engl.

The health team in Tanzania forms a pyramid, the base of which is village medical helpers, rural medical aides, and medical assistants. The structure of services comprises first-aid posts, dispensaries, health centres, district hospitals, and national reference hospitals. First aid posts, staffed by village medical workers, are located in scattered villages and have been introduced to alleviate the load on dispensaries. Village medical helpers are chosen by the village they will serve and are not salaried. They undertake 3-4 months training at the nearest health centre or hospital. The dispensaries are staffed by either a rural medical aide or a dispensary assistant. The rural medical aide, who is a primary school leaver, receives 3 years training; the dispensary assistant receives considerably less and is being phased out. The health centres, directed by medical assistants,

provide primary care to people nearby and serve as referral centres for dispensaries. Medical assistants refer patients from the health centres to the district hospitals, which are run by medical directors. The medical director is responsible not only for running the hospital but also for administering public health programmes and guiding and supervising health centre staff within his district. Theoretically, this structure functions smoothly, but in practice problems arise due to inappropriate medical education and lack of both auxiliary career paths and auxiliary supervision. (AC)

- 1503 Zambia, Ministry of Health.** *Ten year national health plan 1972-1981.* Lusaka, Ministry of Health, 1972. 93p. Engl.

The 10-year plan for health services development in Zambia reviews the geographic, demographic, and economic characteristics of the country; sets forth the present status of health and health services; and proposes activities aimed at increasing training programmes, providing care to rural peoples, and emphasizing preventive medicine. Recommendations are summarized for each year and are classified as general, buildings, personnel, and training. Statistical data for population, health manpower and facilities, government expenditures, and cost estimates for recommendations are assembled in tables, and a brief review of preindependence history, an explanation of social and health legislation, and a list of leprosy settlements are annexed. (AC)

II.3 Planning

See also: 1426, 1461, 1464, 1487, 1577, 1603, 1607, 1612, 1674, 1730, 1743, 1870, 1974, 1983, 2004, 2007, 2043

- 1504 Adjou-Moumouni, B., Geller, A.** WHO, Brazzaville. *National health planning.* In *An Integrated Concept of the Public Health Services in the African Region*, Brazzaville, WHO Afro Technical Papers No.2, 1970, 85-95. Engl.
See also entry 901 (volume 2).

Health planning is the rationalization of a solution to health problems; in the African region, national governments devise a health plan for the country and exert fiscal pressures on private as well as public agencies to implement the plan. Steps in preparation of a national plan progress from a definition of priorities, through a formulation of econometric models, to a choice of possible solutions. These steps apply to planning in all development sectors, and adherence to them facilitates a coordinated approach to development. The definition of priorities may be accomplished by a system of ranking problems for their scope, the possibility of implementing solutions, their impact on the socioeconomic

life of the country, and the cost in relation to the benefit. Many mathematical equations exist for use in formulating econometric models, and all require accurate data on resources, manpower costs, etc. Solutions, which constitute the final step in preparation, will contain detailed administrative, organization, and management components. When a plan is adopted, its implementation comprises the administrative measures to control resources, and provisions should be made for evaluating the plan at various stages, including an overall evaluation upon completion. (AC)

- 1505 Adjou-Moumouni, B.** WHO, Brazzaville. *Basic health services.* In *An Integrated Concept of the Public Health Services in the African Region*, Brazzaville, WHO Afro Technical Papers No.2, 1970, 27-37. Engl.

See also entry 901 (volume 2).

The basic health services of a country are those that provide essential care to a country's population; they must be within the financial and physical resources of the providing body and should encompass preventive, educative, curative, and rehabilitative services. In Africa, they take the form of maternal child health, medical care, collection of data, and laboratory services. Their planning should progress systematically: the planner should formulate feasible, measurable objectives; define the activities to meet the objectives; evaluate the human, financial, and physical resources available; select the techniques to be used; establish a schedule of operations; and evaluate the results, introducing modifications in the programme where indicated. Planners should keep in mind that health services already exist and these should be modified not discarded. (AC)

- 1506 Attah, E.B.** *Health and Nigeria's third national development plan.* Journal of the National Medical Association (New York), 68(3), May 1976, 256-257. Engl.

As a result of efforts by members of a national health planning project, Nigeria's third 5-year development plan focuses on significant health measures. The plan aims for expanded training programmes; balanced health facility distribution; stepped-up communicable disease control; and standardized organization, administration, and management in the health services. These objectives were defined by the national health planning project after its members had examined health programme recommendations from each of Nigeria's 12 states and had visited the states to identify needs that were not covered by the recommendations. The proposed health care system, upon which the plan was based, is a network of basic health units serving a population of 50 000. These units comprise 1 comprehensive health centre, 4 smaller health centres, 5 mobile clinics, and 20 health clinics. The total is staffed by 2 physicians, 2 public health nurses, 5 nurses, 5 midwives, 8 community nurses, 25 community health nurses, 2 laboratory technicians, 2 health inspectors, 2 dental hygienists, 6 medical records assistants, and an X-ray technician. Costs are estimated at some \$800 million. (AC)

- 1507 Barrett, L.T.** *Need for a regional focus in rural health services.* Public Health Reports (Rockville, Md.), 90(4), Jul-Aug 1975, 349-356. Engl. 11 refs.

Regional planning, which relies on research into health manpower, facilities, and consumer attitudes, is the key to success in devising health care systems in rural areas. Methods, applicable in the USA, have been designed by the National Center for Health Services Research, together with the Department of Agriculture, the Farm Foundation, and various academics. They isolate four areas of concern in health services: availability, accessibility, organization, and decision-making processes. Availability and accessibility depend on the number and location of medical facilities and manpower and the development of communication and transportation technology. In rural areas, where facilities are widespread and personnel limited, regional plans should aim to distribute and coordinate services of hospitals, clinics, group practices, and mobile units. In areas where there is a doctor shortage, plans should include paraprofessionals to fulfill many medical functions. They should also provide for the creation of health maintenance organizations, responsible for managing and coordinating community health resources. The governing boards of health organizations should consist of both the users and providers of health services, so that they reflect decisions and viewpoints of their region. (ES)

- 1508 Bergner, M., Bobbitt, R.A., Kressel, S., Pollard, W.E., Gibson, B.S., Morris, J.R.** *Sickness impact profile: conceptual formulation and methodology for the development of a health status measure.* International Journal of Health Services (Westport, Conn.), 6(3), 1976, 393-415. Engl. 33 refs.

A health status measure, the sickness impact profile (SIP), is conceptualized and the methods for developing it are described. The need for such a measure, which is sensitive and appropriate, culturally biased and based on sickness-related behaviour, is discussed. A model of sickness behaviour is presented as a guide for methodological development. The description of the initial developmental stage of the SIP includes detailed discussion and documentation of the collection, sorting, and grouping of items that constitute the SIP; scaling of the items; scoring of the instrument; and testing and revision of the prototype instrument. Results of preliminary tests of reliability, validity, and administrative feasibility are presented. Subsequent steps in revision and finalization, now under way, are outlined. (Modified journal abstract.)

- 1509 Chen, P.C.** *Health care for the developing countries of Southeast Asia.* World Hospitals (Oxford), 5, 1969, 93-98. Engl.

Plans for medical and health systems in South East Asia should include unified regional administrative control; integrated curative and preventive services; and training programmes for multipurpose auxiliary health workers. Unified regional administrative control

ensures the best utilization of existing resources; through it, a graduated system of health services can be made available and accessible to every patient. The system should progress from the small, local health post, through district and sector hospitals, to the large, central, regional hospital, capable of caring for the rarest diseases. At every level, preventive and curative services should be integrated under one regional medical officer. The staff of the system should comprise multipurpose auxiliary health workers and physicians, and training should be geared to the level of services the worker provides. (ES)

- 1510 Chhabria, N.** *Socio-economic impetus on the work of physiotherapists in India.* Progress in Physical Therapy (Amsterdam), 1, 1970, 291-296. Engl.

The problem of rehabilitating the physically handicapped in developing countries is complicated by socioeconomic conditions. Persons who are below a certain socioeconomic level cannot take advantage of provision of modern physiotherapy and physical rehabilitation due to the environmental barriers to effective treatment and regular follow-up. The importance of these two factors was studied in a sample survey in and around Bombay, India. The study population comprised 180 patients who had been fitted with braces or prostheses. Of these, 80 had been fitted with braces and 100 with artificial limbs. Forty-one percent of those given braces were using them and 91% of those given artificial limbs were using them at least part of the time. In most cases, however, follow-up and maintenance were poor: braces and limbs were badly worn, and boots were not replaced for financial reasons. Often equipment was abandoned because it was incompatible with the patient's way of life. It is argued that treatment must be adapted to the particular socioeconomic conditions of a country; research must be undertaken to develop locally designed and locally made equipment; and students in the various categories of medical, paramedical, and technical professions should be trained in rehabilitation so that the handicapped can receive treatment and follow-up closer to home. (HC)

- 1511 Cibotti, R., Bardeci, O.J.** Pan American Health Organization, Santiago. *Enfoque critico de la planificacion en America Latina. (Critical approach to health planning in Latin America).* Santiago, Pan American Health Organization, n.d. 19p. Span.

Advanced Seminar on Policies and Strategies in the Process of Health Planning, 15 Nov-10 Dec 1971.

Document requested for teaching use at the seminar.

The history and development of the planning concept since its acceptance by Latin American countries in the 1960s is traced, and some of its present shortcomings are pointed out. First among these are alienation and misunderstanding between planner and administrator; the administrator sees the planner as the representative of not a parallel body, but a body that imposes its will

upon the administration. The administrator, as politician, is often more concerned with currying favour with his supporters than with applying long-term "rational" measures recommended by planners. Thus, planning, despite its formal establishment throughout Latin America, has not proved to be as effective a tool for policymaking and action as expected. (HC)

- 1512 Cook, R.J.** *Distribution of oral contraceptives: legal changes and new concepts of preventive care.* American Journal of Public Health (New York), 66(6), Jun 1976, 590-591. Engl.

The latest trend in contraceptive legislation is the repeal or modification of laws that prohibit nonphysicians to prescribe oral contraceptives. In many countries, birth control pills are now placed on a par with other drugs used in preventive medicine, which is a vital part of most developing health systems. New regulations are being established to determine guidelines for the training of auxiliary family planning personnel and for back-up referral systems that would facilitate the distribution of contraceptives through nonclinical outlets. Examples of recent legal reforms in both developed and developing countries are included. (RD)

- 1513 First Asian Congress of Rural Medicine, Usuda, Japan.** *First Asian Congress of Rural Medicine: Daily News.* Usuda, Japan, First Asian Congress of Rural Medicine, Oct 1973. 1v.(various pagings). Engl.
First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.
See also entry 1519.

Some of the excitement of the First Asian Congress of Rural Medicine, Usuda, Japan (1973), is recaptured in this up-to-the-minute account of the participants, ideas, and highlights of the congress. Full text reproductions of papers presented and shortened versions by the authors themselves are interspersed with photographs, illustrations, tables, and small informative or newsy items. Topics cover a broad range, including health services planning, health manpower training, epidemiology, pollution of the environment, occupational health, etc. (HC)

- 1514 Gish, O.** *Planning the health sector: the Tanzanian experience.* London, Croom Helm, 1975. 209p. Engl. Refs.

Although national health planning was introduced into Tanzania in 1964 with the first 5-year plan, the socialist principles of the 1967 Arusha Declaration were not seriously applied to health planning until the third 5-year plan (1975-1980). A new approach to planning was undertaken to identify investments that would provide the greatest number of people with health services. Plans to expand costly facilities, training, and drugs were exchanged for those to extend auxiliary training, rural health centres, and dispensaries. One priority that emerged in this cost-benefit approach was the need to teach health personnel how to purchase, use, and prescribe drugs effectively. Another priority was to involve the population in its own health care. The latter has

been accomplished to some extent through the concept of *ujamaa*, a Swahili word meaning living and working together. The scattered populations have been encouraged to contribute to Tanzania's development by joining *ujamaa* villages, and, from 1971-1973, the numbers of persons participating have increased from 500 000 to about 2 million. Meanwhile, the government has been reorganized so that development services, including health services, are closer and more accountable to the people. The central ministry no longer has jurisdiction over district health services, although it has retained authority over voluntary agencies and hospitals within the country's capital city. District health services report to their director of development, who, in turn, reports directly to the Prime Minister's Office. Statistical data are tabulated. (AC)

- 1515 Grossi, R.** *Methodologie de la planification de la sante en etude au Venezuela. (Health planning methodology under study in Venezuela).* Annales de la Societe Belge de Medecine Tropicale (Brussels), 48(3), 1968, 315-338. Fren. 10 refs.

A method for health planning developed in Venezuela but applicable elsewhere is set forth. It aims to define national health policy and its relation to other sectors of the economy and to prepare programmes based on a rational allocation of resources. It also enables the planner to pursue priorities and to assess at a glance the cost in resources of any programme. The procedure is to reduce each health "activity" to the lowest common denominator, or "instrument." For example, a health consultation is broken down into the number of "doctor-hours" (instrument); vaccination into "nurse-vaccinator hours"; hospitalization into "beds"; etc. Then a dollar figure is assigned to each. Activities can then be compared and adjusted to a standard model, and maximal effectiveness and efficiency assured. Other topics discussed are levels of planning; the decision-making process; preparing an executive body to implement and evaluate a plan once it is decided upon; and budgeting for the plan. (HC)

- 1516 Hall, T.L.** *Planning for health in Peru: new approaches to an old problem.* American Journal of Public Health (New York), 56(8), Aug 1966, 1296-1307. Engl.

The first national health plan of Peru, which covered the 5 years between 1966 and 1970, was founded on the principles of a Latin American planning model. On the basis of demographic, social, economic, and other criteria, the country was divided into "programming areas" of approximately 200 000 persons, and costs were estimated for reducing mortality and morbidity due to a variety of preventable diseases. The estimates were often a compromise between the costs of maintaining but not improving health status and the costs of doing everything possible to improve health status. Although the planning model envisioned the programming areas as the units for planning and implementation, in practice the Peruvian Planning Office discovered that cooperation with local authorities and the use of sampling techniques at the regional level

proved much more rational. Before any planning was undertaken in Peru, more than 100 persons completed courses in health planning, and this training, provided to members of the health ministry, social insurance funds, and health agencies for the armed and police forces, aimed at anticipating problems in the introduction of the Planning Office's recommendations. A reorganization of the health ministry was also directed at facilitating this. (AC)

- 1517** Idriss, A.A., Lolik, P., Khan, R.A., Ben-youssef, A. WHO, Geneva. *Sudan: national health programme and primary health care, 1977/78-1983/84*. Bulletin of the World Health Organization (Geneva), 53(4), 1976, 461-471. Engl.

A system of health programming that was used in Sudan for its national health plan (1977-1984) provides a method for identifying health priorities and translating them into realistic programmes. In the preparation stages, data collection is essential and should include information on demography, economic and social development, health facilities and personnel, unit costs per output in the health field, environmental health, and the existing health policies. The first step in the plan is to define what constitutes a health problem and to weigh the criteria according to their importance. In Sudan, it was decided that a health problem (1) predisposes to sickness in the community, (2) kills people in large numbers, (3) harms the development of young people, and/or (4) makes people fall ill in large numbers. The next step is to formulate criteria for a possible solution and weigh them. The Sudanese criteria were that a solution must produce an immediate improvement in community health; that it be available to as many as possible of the population at risk; and that it suit the national development plan, meet politically expressed needs, increase social satisfaction and social equity, confer economic benefits, accommodate local cultures, and emphasize the needs of younger age-groups. With this basis, data collected in the preparatory phase are translated into a health problem "point score." Possible solutions are also scored, according to the criteria, and added to the problem score. The problem and solution with the higher score is the top priority. Examples of Sudan's programmes are included. (AC)

- 1518** International Hospital Federation, London. *World hospitals: special issue on planning and building health care facilities under conditions of limited resources*. World Hospitals (Oxford), 11(2-3), Spring-Summer 1975. 224p. Engl. Refs.

These papers, presented at the Fifth International Public Health Seminar, Nairobi (1974), examine various ways of establishing a health service network using limited material, financial, and manpower resources. The papers focus on the planning and construction of medical facilities that are both economical and suited to the needs of developing countries. The papers proceed from general observations on regional planning (setting priorities, formulating policy, obtaining information, etc.) to the planning and implementation of

specific facilities, such as a kitchen for the relatives of patients in the Ndolage Hospital, Tanzania. This kitchen, designed according to traditional patterns (circular) and constructed of locally available materials, is relatively inexpensive and satisfies a cultural need — the need for relatives to accompany patients to the hospital. Numerous examples of other existing facilities — hospitals, outpatient clinics, and rural health centres — are included; they are accompanied by photographs, illustrations, and in some cases, blueprints. (HC)

- 1519** Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., ed(s). *Rationale for rural medicine: an Asian experiment*. Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974. 239p. Engl.
First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.
Individual articles have been abstracted separately under entries 1423, 1492, 1551, 1628, 1721, 1786, 1787, 2015, 2051, 2058, and 2093.
See also entry 1513.

Papers presented at the First Asian Congress of Rural Medicine, Japan, are compiled under five themes: status of, and measures for, public health and medical care services in rural villages; nutrition problems in rural villages; communicable and parasitic diseases in rural villages; health problems arising from modernization of rural villages; and occupational health problems in agriculture. The conference considered the problems of modernization in the agricultural sector, now rife in Japan but holding implications for other countries in the future. (HC)

- 1520** Lambo, T.A. WHO, Brazzaville. *Planning and organization of public health facilities in Africa*. In Biomedical Lectures, Brazzaville, WHO Afro Technical Papers No.4, 1972, 71-83. Engl.

A statistical service for gathering figures of mortality, morbidity, utilization, etc. is a basic element for effective health services planning; through the accumulation of such statistical data, health priorities can be established and cost-benefit analyses, etc. can be undertaken. If no statistical service exists or if an existing service is not utilized by health planners, implementers, and trainers, health and training programmes are likely to be mere imitations of inappropriate programmes. This tendency to adopt inappropriate programmes has plagued all the African countries and has resulted not only from the lack of health priorities but from political expediency and a fear of innovations that might dilute the quality of medical care or education — all of which can be remedied by the accumulation and study of statistics. (AC)

- 1521** Malhotra, P., ed(s). *Health economics*. Indian Journal of Public Health (Calcutta), 11(1), Jan 1967, 25-27. Engl.

During a workshop on public health and socioeconomic development held in New Delhi, India, the following facts and ideas were brought forth: the control and eradication of diseases have positively affected India's

socioeconomic development, but the precise increase in productivity is difficult to evaluate; only 17% of the population survive to age 45 — an incalculable waste of manpower; improved sanitation and nutrition would result in a healthier workforce for the agricultural and industrial sectors; a "health economics unit," established within the health ministry, could assess the cost of planning, implementing, and evaluating disease control efforts; and accurate demographic statistics and a better knowledge of attitudes and behaviour toward health care and contraception are needed in health care planning. Recommended priorities are improving data collection, reevaluating health objectives, and expanding health care services to rural areas. (HC)

- 1522** **Manuwa, S.** *Principles and methodology of planning the development of national health programmes in underdeveloped countries.* West African Medical Journal (Ibadan), 10, Apr 1961, 69-86. Engl. 15 refs.

Some basic principles for health planning in a developing country, based on the author's experience of health administration in Nigeria, are put forward. They can be summarized in six points: (1) health planning must be regarded as part of an overall exercise designed for total economic development; (2) planning should be done by a specially selected commission, who are allowed considerable freedom of action and should not be unduly hurried; (3) objectives should depend on the aims of medical policy — generally unequivocal in a developing country where indications call for preventive medicine; (4) the scope of planning must be comprehensive, i.e., concern itself with problems of general administration, public health, curative service and medical relief, industrial health, professional education, medical research, health insurance, etc., and include both public and professional participation; (5) planning must be bold but selective, in view of meagre resources, and must be undertaken with an eye to posterity; and (6) planning should be facilitated by the establishment of a permanent central authority for coordinating all health development, particularly in countries with a federal system of government. The author recommends that such a body be established in Nigeria in the near future. (HC)

- 1523** **Mein, P., Jorgensen, T.** University of Nairobi, Nairobi. African Medical and Research Foundation, Nairobi. *Design for medical buildings: a manual for the planning and building of health care facilities under conditions of limited resources.* Nairobi, University of Nairobi, Housing Research and Development Unit, Aug 1975. 146p. Engl. 32 refs.

This manual contains design, construction, and cost guidelines for the building and extension or improvement of medical facilities. It has been prepared primarily for health personnel who, in rural Africa, must often be their own architects. It may also be of value to the architect who is confronted with medical buildings in rural areas. Furthermore, it provides information that could be useful to people in raising funds

and allocating money for medical purposes. The manual concentrates on the rural hospital; however, the principles and guidelines herein are considered equally relevant to the design of health centres and dispensaries. The full range of architectural activity, from the initial feasibility study to supervision of the work on site, is covered, but it is emphasized that each building problem requires its own solution according to local needs and local materials and skills. To this end, a considerable amount of space has been devoted to explaining how buildings can be designed from scratch. Where plans are shown they are intended to illustrate the design principles involved and not to act as prototypes. (Modified introduction.)

- 1524** **Morley, D.C.** *Is the prestigious teaching hospital in the third world a disaster?* Nursing Times (London), 71(4), Suppl., 23 Jan 1975, 10-11. Engl.

The author suggests that the construction of large prestigious teaching hospitals — one of which may absorb a quarter or more of a country's health budget and may cost a quarter or a third as much as the original expenditure per year to maintain — has misdirected health care efforts in the Third World. These hospitals, justified in terms of their value as referral and training centres, fail in both mandates: they tend to serve only those in their immediate vicinity, many of whom could be treated in smaller, less expensive institutions; and they train medical personnel in an artificial environment and in an inappropriate way. Rather, doctors and nurses ought to be trained in the skills and attitudes that will enable them to run a district health service in their own country. The need to train and utilize local health workers (such as traditional midwives, part-time health workers, etc.) is emphasized, and the medical profession is castigated for its opposition to the training of auxiliaries. (HC)

- 1525** **Pajestka, J.** Pan American Health Organization, Santiago. *Mecanismos para la formulación y ejecución de planes. (Mechanisms for the elaboration and implementation of health plans).* Santiago, Pan American Health Organization, n.d. 21p. Span.

These observations and recommendations on health planning and health planning mechanisms are based on the experience of socialist countries in Eastern Europe. Planning is seen as more than a mere analytical process designed to uncover the most viable and adequate means to development; it is a generic social process comprising interactions of many institutions and forces (economic, social, etc.). For this reason, it is important that management, and not just experts, be involved in the planning process. Too often the latter tend to concentrate on the formulation of models rather than alternative policies and to confound the former with unintelligible jargon. Greater involvement of management in planning will, furthermore, facilitate future implementation. For developing countries, it is recommended that planning be done on a yearly basis by a government body designated for that particular

purpose. Examples of such planning bodies from other countries are given. (HC)

- 1526 Pan American Health Organization, Washington, D.C. *Primary care, radiology system: report on a meeting held in Washington, D.C., 17-21 Mar 1975.*** Washington, D.C., Pan American Health Organization, 1975. 1v.(various pagings). Engl. 12 refs.

A radiological system suitable for district or rural hospitals, small clinics, health stations, or physician offices within developing countries has recently been field-tested in South East Asia and has proved satisfactory; it is capable of basic radiographs of the chest, extremities, the abdomen, head, and the spine. Its present power supply is battery-operated (cadmium battery pack); suitable alternatives, however, might be a capacitor discharge system, nuclear fuel cell, or a flywheel system. The X-ray unit is rugged and simple; it produces X-ray films of uniform quality and can be operated successfully by minimally trained personnel. Manuals for operating and maintaining the system, which were produced in the local language, proved valuable. Specifications for similar units are set forth; cost-benefit analyses are recommended. (AC)

- 1527 Pan American Health Organization, Washington, D.C. *Health planning: problems of concept and method.*** Washington, D.C., Pan American Health Organization, Scientific Publication No.111, Apr 1965. 71p. Engl.

This is a manual of the principles of planning in the health sector; it is the outcome of dialogue between economists and specialists in various health disciplines. It aims to improve health services in ways that satisfy the requirements of overall development. Topics treated include planning and public health, community diagnosis, determination of feasible alternatives in local programmes, and preparation of regional plans and the national plan.

- 1528 Parmar, S.L. *Health care in the context of self-reliant development.*** Contact (Geneva), 32, Apr 1976, 1-4. Engl.

The author calls for a realistic approach to development; essential to this are a recognition of deficiencies and resources and a mobilization of resources to meet the deficiencies. At present, the most important resource of developing countries — manpower — is viewed negatively. While "it is true that people represent the burden of needs and consumption . . . the same people are also producers, innovators, and custodians of many potentialities still to be developed." Mobilizing people requires that they see value in development and want to contribute to it, and this means people must benefit immediately from progress in development. (AC)

- 1529 Patel, T.B. *National health plan and the concept of the health team with special reference to structure and functions of the health team.*** Indian

Journal of Medical Education (Bombay), 11(2-3), Apr-Sep 1972, 109-113. Engl. 9 refs.

The author observes that the main objectives of the Indian health plan are to provide comprehensive health care to all by 1981, eradicate or control communicable diseases, and control population increase. These objectives can be achieved if a physician controls curative care as well as community health activities, such as child care, nutrition, family planning, and sanitation programmes. Successful examples of integration of preventive and curative medical care as well as the organizational setup envisaged in this article can be seen in several countries, e.g., the USSR and Eastern Europe. When health care is a state responsibility, it can be comprehensive, free, and readily available with emphasis on prevention at all levels. The author comments that doctors must be trained to serve the community and, to this end, recommends several changes in present education. A detailed outline of an organizational framework for the promotion and working of integrated health services accompanies the article to serve as a model.

- 1530 Pierre-Noel, L. *Manuel de sante publique. (Public health manual).*** Paris, Librairie Maloine S.A. Editeur, 1970. 208p. Fren. Refs.

This well-organized, comprehensive manual sets forth some practical suggestions for setting up a functional health service in a developing country. The book is divided into two sections: the first discusses health services administration (including administration of both human and material resources); and the second is a fairly detailed treatment of the elements that constitute public health — disease prevention (epidemiological control and environmental health), health promotion (MCH, nutrition, occupational, and mental health services), treatment and rehabilitation services, health education, and various functions related to public health (statistical analysis, laboratory work, nursing, and health legislation). The chapter on health manpower contains some suggestions regarding the recruitment and deployment of auxiliary health workers; it points out the areas in which they may fail, the reasons for their failure, and ways of anticipating and preventing it (e.g., strict delineation of duties, adequate supervision and encouragement, sanctions, etc.). (HC)

- 1531 Protestant Churches Medical Association, Nairobi. Lutheran Institute of Human Ecology, Park Ridge, Ill. *Health is wholeness: report of the Limuru conference on the healing ministry of the church.*** Nairobi, Protestant Churches Medical Association, Feb 1970. 127p. Engl.
Conference on the Healing Ministry of the Church, Limuru, Kenya, Feb 1970.

The main purpose of this conference, attended by Christian medical workers from across Africa, was to consider the future direction of the healing work of the church. The recurring theme throughout the conference presentations was the need to place much more emphasis on community medicine, which can achieve far more

with limited resources than can the existing disease-oriented, curative services. This report contains many examples of the successful introduction of community outreach in Africa, especially Kenya, Tanzania, and Uganda, and there are several pointers to help facilitate the introduction of this community approach at a missionary hospital. With the recognition of the value of community medicine there is also a need for a much less insular approach to planning so that, for example, there will be some mechanism for monitoring and responding to the needs of the community and, on a broader level, for coordinating activities with those of other church and government health services in the region. (MPM)

- 1532 Rao, K.N.** *Health needs of the community.* Journal of the Indian Medical Association (Calcutta), 59(5), 1 Sep 1972, 193-200. Engl.

A statistical examination of the current health status and existing health services in India reveals that: India, with 2.5% of the world's land area, has 15% of its population; the infant mortality is 139 per 1 000 (1969); life expectancy (1968) is 53.2 for males and 51.9 for females; 40% of the population is children; one-third of the children die before age 5; the annual population growth rate is 2.4%; 19.9% of the population is now living in the urban areas, many of these without adequate housing, sanitation, employment opportunities, etc.; health expenditure is about 0.6% of the gross national product; mortality and morbidity are greatest among women; etc. These statistics strongly indicate the need for basic health services, maternal and child care, and family planning delivered by large numbers of primary health workers, but the existing "health pyramid" is upside down, with more doctors on top and fewer paramedical personnel on the bottom. The situation is further complicated by five factors that hinder development in the third world: uninformed and ill-prepared leadership, civil services untrained for developing economies, financial procedures inherited from colonial administrations, noninvolvement of technical expertise in decision-making, and lack of citizen participation in development activities. The training of health teams is highly recommended, and the medical educator is exhorted to prepare future physicians for their role as leaders and agents of change. (HC)

- 1533 Read, M.** WHO, Brazzaville. *Social and cultural backgrounds for planning public health programmes in Africa.* Brazzaville, WHO, 1957. 42p. WHO/AFR/HE/22. Engl. 26 refs.
Unpublished document.

When public health planners and workers design and implement programmes for rural villages in Africa, they should recognize that the success or failure of their programme depends on their ability to complement the existing culture. Social participation is essential to public health programmes, and community involvement is more easily secured in places where positive cultural

change is already evident. Before a programme is introduced, therefore, the planner or worker should ascertain what programmes have been implemented previously and how the villagers reacted to them. Another essential preparation is research into the traditional attitudes of the people and an understanding of the point at which villagers are likely to provide initiative to the programme. (AC)

- 1534 Roy, S.K.** *Health centre and its renovation.* Indian Medical Journal (Calcutta), 56, Sep 1962, 197-206. Engl.

In India, the health centre is the key to all health services; it is responsible for administering public health activities, maternal child welfare services, school and industrial hygiene, health surveys, curative medicine, health education, and the collection of vital statistics. Given this role, a health centre should not be established until adequate planning and funding have been allocated, and its planners should draw from the experience of the outpatient dispensaries that operated in India before 1947. These were victims of poor financing, inadequate referral systems, and improper priorities. An understanding of the problems that plagued these preindependence health services should help planners establish a nationwide network of properly functioning health centres. Procedures they might follow in planning and implementing health centres are detailed and include the steps for selecting a site, arranging accommodations and residential quarters, administering clerical duties, establishing a health service code, deciding working hours and systems, maintaining supply inventories and accounts, and planning public health works. (AC)

- 1535 Sai, F.T.** *Planning for the health needs of the people.* Ghana Medical Journal (Accra), Sep 1965, 108-112. Engl.

The author suggests certain priorities and procedures when planning for the health needs of a country by referring to the Ghana Health Plan. He comments that planners must assess the political and economic climates of a country and the perceived and actual needs of its people. These needs can be determined through an analysis of accurate data on communications and personnel, demography, and vital statistics. For most developing countries, including Ghana, the establishment of mechanisms for collecting these needed statistics is a major priority. Once health needs, such as better maternal and child health, control of preventable diseases, improved nutrition, and increased health manpower are established, the objectives with reasonable targets and budgets can be determined. In Ghana, highest priority has been given to the development of rural health care including the establishment of a system of local hospitals, centres, and posts and the promotion of community health education. Before such a plan is implemented, however, it must be recognized that improved utilization and administration of existing hospitals is preferable to the construction of new ones and that the active cooperation and support of

government agencies, professional and nonprofessional associations, and the public must be sought and encouraged. In general, plans must be flexible enough to accommodate changes in socioeconomic conditions or medical technology; objectives should be assessed as targets are reached; and health care planning must be set in the general plan for the improvement of society and economy. (FD)

- 1536 Schulberg, H.C., Sheldon, A., Baker, F.** *Program evaluation in the health fields*. New York, Behavioral Publications, 1969. 582p. Engl.

Papers and studies relevant to the evaluation of health programmes are brought together in this volume intended for researchers, administrators, and students in the health field. The material is divided into five sections: "Section 1: Concepts and General Issues" is concerned with the purposes of, and approaches to, evaluation; "Section 2: Research Designs" is concerned with the development of evaluation methodologies; "Section 3: Evaluation Techniques and Indexes" examines a number of tools for evaluation; "Section 4: Examples of Program Evaluation" presents a number of case studies; "Section 5: Implementing Research Findings" dwells particularly on the communication aspect of putting research findings into practice. It is hoped that these selected readings will inform the administrator of the complexities of evaluation; inspire the researcher to question current concepts and techniques and strive toward the development of better ones; and provide the student of public health or social welfare with a valuable source of reading material. (HC)

- 1537 Scrimshaw, N.S.** Pan American Health Organization, Washington, D.C. *Myths and realities in international health planning*. Bulletin of the Pan American Health Organization (Washington, D.C.), 9(3), 1975, 247-254. Engl. 12 refs.

The author challenges the rationale underlying many nutrition and health programmes in the developing world. Knowledge of the cause of a disease does not automatically lead to its cure and prevention; often overlooked, for example, is the synergistic action between infection and malnutrition. A comprehensive approach is required, involving preventive medicine and public health services, in order to ease the demand for direct medical attention. Careful planning of these programmes is necessary, however, to ensure that they reach the target groups, usually mothers and preschool children; one particularly effective method is to extend health education and services into the home by using auxiliary health workers or volunteers. The author cautions that modern health care programmes, which tend to be capital-intensive, difficult to implement on a national scale, and rely upon highly trained professionals, are often inappropriate to the needs and capabilities of developing countries. (MPM)

- 1538 Sedeuilh, M.** *Problemes poses par la planification sanitaire dans les pays en voie de developpement. (Problems posed by health planning in developing countries)*. Annales de la Societe Belge de

Medecine Tropicale (Brussels), 48(3), 1968, 295-302. Fren.

A health planning model is proposed for developing countries (in this case, francophone Africa), and the problems that must be overcome are pointed out. The model forms a three-tiered pyramid — the first stage involves study of the population, diagnosis of its problems, and establishment of priorities; the second, or decision-making stage, consists of presenting a specific plan to the authorities for their approval and support; and the third stage consists in implementing the plan. Problems encountered during the first stage relate to shortage of information upon which to base a diagnosis; at the second, to the authorities' perception of health as a nonproductive investment; and at the third stage, to national economic and financial instability. This last is particularly important in countries whose economy rests upon the export of a single commodity that may fluctuate sharply on the world market and force the interruption of a health campaign with devastating effects. These problems are compounded by administrative weaknesses, lack of coordination between activities, and political instability. Some recommendations — e.g., that countries base diagnosis on sample studies of the population until such time as accurate census reports are available, that studies to demonstrate the economic benefit of health statistics be undertaken, etc. — are proffered. (HC)

- 1539 Shrivastav, J.B.** *National health plan and the concept of health team: the national health plan*. Indian Journal of Medical Education (Bombay), 11(2-3), Apr-Sep 1972, 99-102. Engl.

Within the Indian government's plans for development, the health sector has been divided into seven subsectors: water supply and sanitation; control of communicable diseases; medical education, training, and research; medical care including hospitals, dispensaries, and primary health centres; public health services; family planning; and indigenous systems of medicine. This division has proved satisfactory and mirrors the experience of three 5-year plans, which have resulted in reduced incidence of communicable diseases; lowered infant mortality; raised life expectancy; and increased hospital beds, primary health centres, and medical colleges. Funds for the health sector have also increased, and now 7.3% of the total public sector outlay has been allotted to the fourth 5-year plan. Future objectives should be increased paramedical personnel and more community-oriented teaching programmes in the universities.

- 1540 Sondhi, P.R.** *Composition and education of the health team: structure and functions of the health team*. Indian Journal of Medical Education (Bombay), 11(2-3), Apr-Sep 1972, 117-120. Engl.

The author discusses India's national economic objectives and the health team's role and constraints in achieving them. He suggests that the health team should comprise a referral hospital, a primary health

centre, a subcentre, and different categories of personnel working therein. The different roles assigned to these institutions as well as to the personnel have been discussed. He asserts that the common objective of all these institutions is to provide health education to the population, through whom alone good health practices can be established. He emphasizes the important role of the subcentre as the peripheral unit of the health team and suggests that primary health services should be consolidated at the subcentre level, utilizing the services of the auxiliary nurse-midwife, the basic health worker, and the health educator.

- 1541 Stromberg, J.** *Community involvement in solving local health problems in Ghana.* Inquiry (Chicago), 12, Jun 1975, Suppl., 148-155. Engl. 12 refs.

An examination of outpatient attendance in a "typical" rural community in Ghana — the Wenchi District — revealed that 70-80% of rural residents were not availing themselves of modern health services. Although all the district's health facilities boasted average attendance rates (100-300 patients per day), these attendances were limited to (1) persons from within walking distance of the facility, who came not only for medical care but also, to a limited extent, for preventive programmes, and (2) those from further away who came for treatment of diseases that had already become serious. This phenomenon is understandable in the context of rural life, where nearly all of an individual's activities take place within a village and where contact with the larger social system is infrequent. A stronger interface between health service and community, with a greater degree of decision-making within the community, is therefore required, and it is hoped that a project devised for the Wenchi District will meet this requirement. The project, which is briefly described, consists of designing guidelines of simple procedures that can be carried out by village health workers and orienting government personnel in community involvement. (HC)

- 1542 Wahi, P.N.** *National health plan and the concept of the health team: the health team concept.* Indian Journal of Medical Education (Bombay), 11(2-3), Apr-Sep 1972, 103-108. Engl.

Medical services can be provided to the community by the joint efforts of medical, paramedical, and auxiliary personnel. However, the education of these workers needs to be carefully formulated to prepare them to promote health through preventive measures. Feedback from operational research is a valuable tool for revising curricula in health professions and interdisciplinary action-oriented research is also needed in the field of education. Through such research and cooperation between educators and those who provide care, functions of the health professionals and their auxiliaries should be reasonably distributed to ensure a team approach.

- 1543 WHO, Brazzaville.** *Methodes d'extension de la couverture des services de sante dans les zones rurales: rapport sur un seminaire, Brazzaville, 1-6 juillet 1974. (Methods of extending health coverage in rural areas: seminar report, Brazzaville, 1-6 Jul 1974).* Brazzaville, WHO, Aug 1974. 1v.(various pagings). WHO/AFR/PHA/128. Fren. 15 refs.

The objectives of this seminar were to study the present coverage of health services in rural areas of Africa; to examine the characteristics of community health coverage in terms of availability and acceptability; to identify problems in existing services; and to define ways and means of extending health coverage. The seminar's content and methodology are presented in the first part of the report; these are then expanded in the form of working papers, which are reproduced in the appendix. Topics treated in this way include the following: methods of extending health coverage in rural areas; direction and coordination of health auxiliaries at the village level; rural health services in Tanzania; health coverage in Niger; methods of improving health coverage in Midwestern State, Nigeria, and in a rural zone in western Nigeria. A list of seminars organized by the WHO Regional Office for Africa on related topics is appended. (HC)

- 1544 WHO, Brazzaville.** *National health planning: its value and methods of preparation. The place of public health in the economy of the African countries. The principles and methods of evaluation of national health.* Brazzaville, WHO Afro Technical Papers No.7, 1974. 150p. Engl.

This monograph presents the technical discussions from the 18th session of the WHO Regional Office for Africa. The theme is the "place of public health in the economy of African countries"; and the discussions cover planning, operating, and evaluating national public health programmes. Some planning methods are outlined, and these include the empirical method, mathematical simulation, and the effective economic demand method; examples of health planning are taken from the USSR. The lack of statistical data is stressed; however, some figures on population density and increase, mortality, physician and medical school distribution, literacy, and projected requirements for physicians are assembled. Health service expenditures are compared for some of the African countries, and examples of social and rural development projects are set forth. The objectives of a public health plan are divided into mass preventive medicine, individual curative medicine, and medical and scientific research; the methods for attaining these objectives are briefly discussed as are methods for evaluating the process. The postoperational method of evaluation is summarized; this method is retrospective assessment of a programme's impact on socioeconomic and health sectors. (AC)

- 1545 WHO, Brazzaville.** *National health planning: report on a workshop.* Brazzaville, WHO, 10 Aug 1970. 160p. WHO/AFR/PHA/63. Engl., Fren.

Workshop on National Health Planning, Brazzaville, 1-12 Jun 1970.

The participants in a workshop on national health planning sponsored by the WHO Regional Office for Africa from 1-12 June 1970, concluded the following: (1) health planning should be part of economic and social planning; (2) sound administration is essential; (3) everyone concerned should be consulted; (4) health problems should be identified through the collection of data on living conditions, morbidity, mortality, and demography; (5) present methods for collecting data must be improved; (6) research and experimentation must be encouraged in subjects such as management techniques; (7) countries must define health policy and improve decision-making; (8) health priorities must be established before the formulation of targets; (9) targets must be defined in terms of desired results and time required to achieve them rather than resources available; (10) constant evaluation must be part of any health plan; and (11) health planning staff should be trained in the region where they will serve. These conclusions were based on discussions of planning methods that have already been implemented in France, Latin America and the Caribbean, South East Asia, Eastern Europe, and parts of Africa; papers on these methods are included. (RD)

1546 WHO, Geneva. *Health situation in Africa.* WHO Chronicle (Geneva), 30(1), Jan 1976, 3-5. Engl.

The health status of the countries of the WHO African Region closely correlates with their adverse economic conditions, which are also related to climatic, demographic, historical, and sociological factors. Although direct measurements for health status are not available, indirect measurements of mortality, morbidity, and the distribution and utilization of health facilities provide some basis for assessing the health of the 260 million people. Mortality, which is higher than in other regions, is around 150 per 1 000 live births and approaches 30 per 1 000 in the under-fives' group. Much of the mortality and morbidity is due to infectious diseases and malnutrition, which can be prevented through disease control and maternal child health programmes. However, existing facilities are unable to implement programmes that provide satisfactory care to the rural populations — 70-80% of people in the region. Problems stem from a shortage of staff and supplies, an orientation toward curative medicine, and poor transportation and communications systems. To cope with these problems, many African nations are developing primary health care systems that will emphasize auxiliary and traditional health care workers, community participation, preventive medicine, mobile units, and health education. (RD)

1547 Wray, J.D. *Health care and the community: a view of Southeast Asia.* Singapore, Quaker International Seminars in Southeast Asia, 1973. 26p. Engl. 28 refs.
Quaker International Conference on Southeast

Asia, Building Health Through Community Participation and Paramedical Training, Davao City, Philippines, and Cilandak, Indonesia, 22 Jul-4 Aug 1973.

The author reviews the health needs of South East Asia and suggests ways in which the existing modern and traditional health care systems could be combined and improved to better serve the people. Modern Western medical technology cannot readily be transferred to developing countries and yet there is great demand for primary, curative care. (However, the author notes that only a small number of diseases account for 80-90% of patients and that diagnosis and treatment of these are often simple, not requiring fully trained professionals.) An adequate curative service appears to be a prerequisite for acceptance and success of the preventive and promotive health programmes that will ultimately provide the community with long-term benefits. The author believes it is feasible to devise a community level health care programme that will provide all of these services. It would require some modern medicines (antibiotics, vaccines, contraceptives, etc.), while the delivery system would follow the traditional pattern of being socially, economically, and geographically accessible to all of the people. To achieve this, attention should be paid to the health progress being made in China, which has been based on enthusiastic community participation and effective use of "barefoot doctors." The success of the author's proposed community health plan would be determined by the efficient training and utilization of similar paramedical personnel. (MPM)

II.4 Geographic Distribution of Health Services

See also: 1438, 1448, 1470, 1503, 1541, 1554, 1633, 2012

1548 Brockington, F. *World health. 2 edition.* London, J. and A. Churchill, 1967. 373p. Engl.

In this study, the author traces the distribution of disease in the developed and developing worlds. Public health is discussed with reference to geography, beliefs and customs, family life, population, occupation, town life, hospitals, food, and industrialization. Public health practices, which predated World War I in the European movement, are divided historically and include developments after World War I (Yugoslavia, Turkey, and USSR) and those after World War II (most of the developing nations). The author recommends that a permanent framework of public health include unity of control; integrated preventive and curative medicine with emphasis on prevention; coordination of all health services under one system; a well-defined infrastructure; and national health planning. The contributions of WHO to world health are mentioned, and the last part of the book deals with the

measurement of health, including the purpose, sources, and inadequacy of vital and health statistics; the standardization of recording; the measurement of morbidity; the use of sampling in morbidity surveys and public health investigations; methods of collecting data; planning and conducting the survey; the presentation of data; and the statistical needs of developing countries. There are eight appendices and numerous references for each chapter. (RD)

- 1549 Chand, A.** *Health care in rural areas.* Journal of the Indian Medical Association (Calcutta), 40(3), 1 Feb 1963, 130-133. Engl.

Of India's 400 million people, more than 80% live in rural areas where there is a marked shortage of physicians and health services. The doctor shortage is due in part to physician emigration; however, the overall doctor-to-population ratio indicates that distribution, not numbers of physicians, is responsible for inequitable services. The question is, therefore, how can doctors be induced to practice in the socioeconomically and culturally deprived areas of India, areas that lack tap water, electricity, professional contacts, etc. The author suggests that medical training be "substantially subsidized," and that medical students be required to sign a bond for 2-3 years service in rural areas after graduation. He believes also that graduates should obtain clinical experience under expert guidance for 3 years prior to their compulsory service; and that, on completion of service, they should be allowed to migrate to urban centres. Further, he recommends that graduates be given financial incentives, i.e., a salary, a "nonpracticing allowance," and a rural health service allowance (prorated by distance from an urban centre); that retired doctors who seek reemployment be posted in rural areas; that adequate medical supplies be made available; and that countrywide communication systems be improved. (AC)

- 1550 Consul, B.N.** *Rural medical problem: private enterprise and government aid.* Indian Journal of Medical Education (Vellore), 6, Jul 1967, 134-136. Engl.

The Government of India could effectively lure physicians into practice in rural areas by doubling present salaries and offering easy payment loans. Justifying these two steps would present little problem: although physicians spend more time and money on their education than do other professionals, advancement in the government service for rural physicians is painfully slow compared to almost any other group. Because the government is responsible for the health of all the people, it must provide better incentives for rural practice, and the long-term advantages of increasing salaries and proffering easy payment loans far outweigh the expenditures. Physicians entering practice could borrow adequate funds to set up quality medical facilities immediately. They could also maintain their families in cities where schools and other facilities are available. Then, when they have built up a private practice and must begin repaying their loans, they will be much less anxious to return to urban areas. (AC)

- 1551 Ziai, M.** *Present circumstances of rural medicine.* In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 36-38. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

A "bird's-eye view" of rural medicine in Iran reveals that providing 30 million people scattered over an area of 600 000 square miles with medical care is a problem of no mean proportion. In addition to a lack of physicians willing to work in rural areas, Iran suffers from a severe shortage of nurses: whereas there are four nurses for every doctor in developed countries, there are three doctors for every nurse in Iran. Efforts at extending health services to date include: the formation of the health corps programme, under which recent medical graduates fulfill their military service by providing health care in rural areas; the implementation of 1 200 rural health centres operated by the Imperial Organization for Social Services; and the deployment of a number of mobile health centres belonging to the health corps, the Ministry of Health, and the Red Lion and Sun Society (Iranian equivalent to the Red Cross). An experiment recently conducted by the Imperial Organization for Social Services promises to yield interesting results. In a community in southern Iran, where most of the nomadic peoples live, a mobile team of physicians, nurses, and dentists trains young adults to give primary care. The results of this effort have so far proved rewarding, and it is hoped that similar projects will be implemented more widely in the future. (HC)

II.5 Financial Aspects

See also: 1486, 1503, 1514, 1523, 1524, 1814

- 1552 Fernandez Nilo, L.** *Funcionamiento del presupuesto por programas en los servicios de salud.* (Performance of the budget-by-programme in health services). Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 71, Mar 1972, 198-214. Span.

Latin America's interest in modern budgetary management systems has led to the adoption of the budget-by-programme technique as the most efficient method of utilizing financial resources. This technique allocates health resources of all types according to previously established objectives and principles. Various aspects of the budget-by-programme are discussed, including its relation to health planning, the development of programme categories, the incorporation of unit costs, etc. The requirements for maximum performance, such as staff training, administration, and information flow are

also identified. The author recommends that the budget-by-programme approach to health services be implemented as soon as possible, whether or not conditions favour it, because the technique can only be perfected through use. As soon as financial administrators have seen it in action, they will, the author feels, be convinced of its value. (RD)

- 1553 Gottlieb, M.** Maxwell School of Citizenship and Public Affairs, Syracuse University, Syracuse. *Health care financing in mainland Tanzania*. Syracuse, N.Y., Syracuse University, Maxwell School of Citizenship and Public Affairs, 1975. 104p. Engl. 90 refs.

In Tanzania, health care is provided through the Ministry of Health (AFYA), local governments, religious missions, plantation and industrial firms, and private practices. The last are divided into licenced and unlicensed health personnel, and traditional practitioners. The cost and type of services offered by each of these systems are examined in an attempt to forecast the effects of greater AFYA spending. The growth of AFYA budgets in the past 2 decades is reviewed, and an inquiry into the growth capabilities of the major traditional and potential revenue sources is undertaken; an international survey of comparative patterns for financing and institutional control of health care services is conducted. Finally, some suggestions for better health care financing through selective charging and cooperative funding are made. (HC)

- 1554 Office of Health Economics, London.** *Medical care in developing countries*. London, Office of Health Economics, No.44, Nov 1972. 40p. Engl. Refs.

The health, demographic, and economic realities in developing countries demand that emphasis in medical care should be on prevention and treatment of malnutrition and communicable diseases, the promotion of family planning, and the introduction of sanitation. Effective and inexpensive approaches exist for all these priorities, and simple education efforts can prepare rural populations to accept them. The effects of minimal investment in prevention are readily apparent, whereas large expenditures on hospitals affect only localized populations. Because of political pressures, however, developing country governments may allocate more funds for the maintenance of one hospital than they spend on entire public health programmes. Like hospital care, medical education has proved costly and unproductive in meeting health needs; professionals often emigrate or settle in urban areas where only 20% of the people live. Auxiliary health workers have shown that they can provide efficient primary care, but they need suitable training and an adequate system of referral and guidance. (AC)

- 1555 Pan American Health Organization, Washington, D.C.** *Financing of the health sector: technical discussions, XIX meeting of the directing council of PAHO*. Washington, D.C., Pan American

Health Organization, Scientific Publication No.208, 1970. 31p. Engl.

Fifty-two participants at the 1969 directing council meeting of the Pan American Health Organization discussed methods of financing the health sector in Latin America. They concluded that an increase in internal financing of the health sector depends on "improving ways and means of mobilizing money through" tax policy, national health insurance schemes, redistribution of funds through a banking system, new issues of money, and reliance on credit (the ability of future generations to pay). The group called for feasibility studies "to obtain external funds for achieving economic and social goals" and to determine the possibility of establishing a specific regional fund for health purposes. Also, the group urged international financial institutions to devote more funds to the health sector. (AC)

- 1556 Sen, P.** *Financing of medical care insurance in the Philippines*. International Social Security Review (Geneva), 28, 1975, 139-150. Engl.

A two-phase programme in the Philippines aims to provide health insurance coverage for the whole population. The first phase, which has proved successful, is a participatory plan by which wage earners and their employers contribute to a central fund to cover medical and hospital expenses; contribution is based on wages. Although originally only wage earners were beneficiaries, coverage was expanded in 1973 to include employees' dependents. The second phase, planned for 1975, will expand coverage to self-employed individuals, the elderly, and infirm. Again, contribution will be based on income and will be added to the central fund. Benefits for all the contributors and their beneficiaries come from the central fund and are paid directly to the health care providers. A financial breakdown of the first phase is provided. (AC)

- 1557 Shattock, F.M.** *Application of triage to the provision of medical care in developing countries*. Lancet (London), 1(7644), 28 Feb 1970, 461-463. Engl.

By practicing the principle of triage, the Commonwealth Save the Children Fund has been able to make a real impact on the most vulnerable section of the South Korean population. Triage, a concept derived from atomic warfare, means abandoning the mortally wounded so that a much-depleted medical service can concentrate on those with a good chance of survival, and this principle describes the drastic measures taken by the Commonwealth Save the Children Fund in 1968. Faced with a 29% reduction in their budget, the fund was forced to close two of its three free clinics in Pusan. The remaining clinic limited its services to the most vulnerable groups — under-fives, tuberculosis patients to the age of 16, and mothers. These cutbacks enabled the clinic to improve its facilities and services and to hire auxiliaries to free professionals from routine clerical duties. (RD)

- 1558 Speight, A.N.** *Cost-effectiveness and drug therapy.* Tropical Doctor (London), Apr 1975, 89-92. Engl.

A British doctor, after 4 years in a medical school in a developing country, describes Western prescribing habits as "extravagant and wasteful by any standards, but especially in a developing country." Too often, rural dispensaries in developing countries suffer essential drug shortages, while district and teaching hospitals boast extravagant drug expenditures. The author divides drugs into two categories: "type A" were invented 10-15 years ago, have been widely used since, are cheap (due to popularity, expiry of patent, and price competition), are available under a generic name, and are not advertised; "type B" were invented within the last 10-15 years, are still on patent, are sold only under a brand name, and are heavily advertised and extremely expensive. Type B drugs claim some advantages over the type A alternative in terms of efficacy, safety, or convenience, but these advantages seldom justify the increased cost. Examples of the difference in cost between the two types of drugs are illustrated by means of six tables referring to analgesics, antihypertensives, tranquilizers, antihookworm preparations, and antibiotics (oral and parenteral). The author concludes that therapeutic emphasis in developing countries should be placed on the type A drugs and makes some suggestions for encouraging economic prescribing, i.e., that the economic aspect of therapeutics be included in all medical curricula; that the economic aspect be included in all literary discussion of recent therapeutic advances; that journals require drug advertisements to contain the prices of the drugs advertised; and that information on drug costs and the virtues of less expensive drugs be widely disseminated to doctors by the ministries of health. (HC)

- 1559 UNICEF, New York.** *Guide list "Hygeia": guide to UNICEF aid for maternity and children's services in training and service hospitals.* New York, UNICEF, May 1964. 241 p. Engl.

Guide list "Hygeia" is a checklist for hospitals that are preparing requests for aid from UNICEF; it sets forth the equipment that UNICEF will provide in support of maternal child health services in a general hospital. The present version of Hygeia supersedes "Lena," "Jasmin," and "Katrina," which were earlier lists for hospitals ranging from 30-100 beds. The conditions of assistance are that a hospital be part of a coordinated plan for extending health care to rural areas or that it be undertaking training in obstetrics and pediatrics for medical and paramedical personnel. Other recommendations are that it have adequate facilities and staff assigned to caring for mothers and children; that it devote separate rooms for use as wards for maternity, child, and isolation patients; that it have safe water and sanitation arrangements; and that it be accessible. Details for equipment are tabulated and include specifications, quantity, and cost; items are listed alphabetically according to generic characteristics, such as, "needle, hypodermic." (AC)

- 1560 Wen, C.P., Hays, C.W.** *Health care financing in China.* Medical Care (Philadelphia), 14(3), Mar 1976, 241-254. Engl. 49 refs.

Today's China, still a developing country with a per capita health expenditure of \$U.S. 0.50-\$1, has established a complex network of health facilities and health personnel through the efforts of the existing political structure. The curative health services are decentralized and provide care through a variety of plans that combine capitation prepayment and modified fee-for-service. Each plan is striving to make health care accessible to all at low cost, and hence, efforts to curb cost are widely practiced. The responsibilities of the preventive health services (such as health education, screening, family planning, food distribution, etc.) are assumed by the central government and they are provided without charge to encourage maximal utilization. Other features of the Chinese system discussed include self-reliance, self-sufficiency, mass orientation, regionalization, and innovative utilization of existing facilities and personnel. (Modified journal abstract.)

- 1561 WHO, Geneva.** *Interrelationships between health planning and socioeconomic development.* Geneva, WHO Public Health Papers No.49, 1973. 54p. Engl.

Although the health sector affects, and is affected by, every other sector of socioeconomic development, it is convenient to view health programmes as separate entities and to measure the contributions of health to development while ignoring the contributions of development to health. For purposes of measurement, four categories of programmes might be (1) those that aim to improve the level of health, (2) those that aim to increase productivity, (3) those that control health hazards and deterioration of the environment, and (4) those that support or influence a wide range of human activities. These categories and limitations of measuring contributions of health programmes are discussed, and their influence on financial investments in the health sector is probed. (AC)

- 1562 Williams, A.** *Cost-benefit approach.* British Medical Bulletin (London), 30(3), Sep 1974, 252-256. Engl. 10 refs.

This discussion of cost-benefit analysis constitutes a set of guidelines for health planners or decision-makers. Discussion centres around four points: the essence of the cost-benefit approach; its applicability to health services policy making; ways of measuring both benefits and costs; and whether or not cost-benefit analysis is worth the trouble (and cost). With regard to the first point, seven propositions implicit in the assumption that services should be provided only if their benefits outweigh their costs are brought to light and discussed; under the second point, some criteria for judging when cost-benefit analysis is appropriate are outlined with examples; under the third, some often-used benefit indicators are questioned, and other less apparent ones pointed out; and under the fourth, the value of rational

decision-making, as exemplified by cost-benefit analysis, is pointed out. A basic checklist of 19 questions based on the cost-benefit approach are supplied: these may be used to assess the effectiveness or limitations of any recommendation regarding allocation of resources. (HC)

II.6 Cultural Aspects

See also: 1599, 1775, 2001, 2086

- 1563 Appell, G.N.** *Indigenous man: chemotherapeutic explorations.* Survival International Newsletter (London), 10, Apr 1975, 1-3. Engl. 22 refs.

When cultures collide, there is a loss of accumulated human experience because the dominant society usually assumes that the subordinate society has nothing to offer. Although this loss affects all aspects of life, it is especially apparent in the field of chemotherapy. Countless examples have been recorded of the traditional use of herbs for treating certain illnesses, their abandonment and later, the discovery of a biochemical basis for their efficacy. But, if there are recorded examples, how many have not been recognized? In this age of rapid industrialization of even the most primitive societies, efforts must be made to preserve indigenous practices and investigate them, and even more urgent, development planners must be made aware of the vast knowledge that may be lost without such efforts. (AC)

- 1564 Ben-Assa, B.I.** *Bedouin patient.* Israel Medical Association (Tel Aviv), 87(2), 15 Jul 1974, 73-76. Hebrew. 11 refs.

The Bedouin lifestyle, particularly as it affects his behaviour regarding illness and health services, is examined with a view to preparing the young doctor working the Negev or Sinai areas of Israel to deal with the Bedouin as a patient. Some Bedouin customs that may inhibit or confuse the doctor are pointed out. These include the following: going by more than one name, a practice that makes it quite difficult for the doctor to identify the individual in question; visiting and obtaining prescriptions from several doctors, a potentially fatal habit; offering praise instead of money for services rendered; prohibiting women from being photographed for an identity card or undressing for a medical examination; and hesitating to register births and deaths. Some advice regarding the exchange of formalities, the way in which various conditions are generally described, their reputed causes, prevalent diseases, etc. is given. Two case histories, one of a 7-year-old child and the other of a young man of 18, are cited to illustrate these points. (HC)

- 1565 Dunlop, D.W.** *Alternatives to "modern" health delivery systems in Africa: public policy issues of traditional health systems.* Social Science and

Medicine (Oxford), 9, 1975, 581-586. Engl. 33 refs.

Health policymakers in Africa should carefully weigh the costs and benefits of including traditional healers in official health services. Essentially, government has three choices: to declare illegal the practice of traditional medicine; to legalize the activities of traditional healers; or to cooperate with traditional systems by offering training, etc. without actually legalizing them. The first option requires an immense investment in policing activities and ignores the positive aspects of the traditional system, such as accessibility and cultural acceptability. The second option, legalizing traditional healers through licencing, provides an incentive for traditional healers to increase their technical knowledge, but the initial costs of licencing those already in practice would be high and might necessitate the reallocation of funds — a ploy guaranteed to upset health professionals. The final option is the most flexible and the most prevalent in present-day Africa. It permits governments to offer training courses, antiseptic supplies, or commonly used drugs to traditional healers and avoids the strain on resources occasioned by requiring practitioners to be licenced. Examples of policies adopted in nine African countries are tabulated. (AC)

- 1566 Quesada, G.M.** *Language and communication barriers for health delivery to a minority group.* Social Science and Medicine (Oxford), 10, Jun 1976, 323-327. Engl. 20 refs.

The success of health services depends on good communication between the provider and consumer, and this, in turn, requires health personnel to be familiar with the ethnic background, social class, and language of their patients. In the USA, an example of the failure to deal with this need can be seen in the health status of Mexican Americans, who are often members of the lower class and who think in Spanish terms even if they speak English. They ignore or misinterpret many symptoms that their tradition does not recognize as signs of illness; do not understand modern medical jargon; discontinue treatment as a result of medical procedures that offend their sense of dignity; and are especially susceptible to drug and patent medicine advertising. Mexican Americans are accustomed to a *patron-peon* relationship and regard the doctor as an authority figure. However, the authority implies personal interest, and if the personal element is lacking, a patient may be insulted. Other cultural attitudes that interfere with treatment include the concept of *machismo*, which militates against a Mexican American's showing "weakness." This attitude may deter a patient from seeking care or cause him to abandon treatment early, or it may inhibit a Mexican American health professional from seeking advice with a difficult case. Understanding these and other cultural elements is prerequisite to successful health care delivery. (RD)

- 1567 Read, M.** *Culture, health and disease; social and cultural influences on health programmes in developing countries.* London, Tavistock, 1966. 142p. Engl.

To understand the link between culture and health practices in rural areas of developing countries, one must appreciate that the people have established a system that satisfies their basic needs for food, water, fuel, and health care. Changes in these basic practices require a deliberate choice by the people; therefore, health workers cannot effect improvements without knowing the practices and also the cultural bases for them. The roles of the traditional practitioners correspond to those of the Western-trained health worker; they are diagnostician and therapist. In some cultures the roles are separated, and persons first attend the diagnostician who will determine whether the patient's illness should be treated by modern or traditional methods. Few cultures now deny the efficacy of Western medicine in treating some diseases, and therefore successful mass campaigns have been waged against yaws, malaria, trachoma, and tuberculosis. But this is only the first stage in a three-stage process of acceptance. The second stage, which has two facets, is the beginning of community cooperation in setting up facilities for treatment and control, and the increasing demand for services; the third stage, which is yet to come, is a total acceptance of modern treatment in physical and mental health. (AC)

- 1568 Twumasi, P.A., Bonsi, S.K.** *Developing a health care system in Ghana.* Journal of the National Medical Association (New York), 67(5), Sep 1975, 339-344, 391. Engl. 16 refs.

Two medical systems, the traditional and the modern, coexist in Ghana and could greatly benefit from sharing experience and knowledge. Modern medicine, in its effort to be wholly scientific, views illness as a physiologic deviation and refuses to integrate cultural and social patterns into its diagnosis and treatment. Traditional medicine, on the other hand, views illness as the result of social deviation and, therefore, incorporates all the influences of culture and biology into treatment. Both systems can contribute positively, and efforts should be undertaken to encourage mutual cooperation and to introduce traditional practitioners to modern therapies. (AC)

- 1569 Whiteman, J.** *Social factors influencing health education among Chimbu.* International Journal of Health Education (Geneva), 9(1), 1966, 8-13. Engl.

Methods and approaches of health education need to be fitted to the attitudes and customs of the people to whom they are aimed; for instance, health educators who wish to motivate the Chimbu in Papua New Guinea should be aware of some social phenomena characteristic of that tribe. Men and women have segregated living quarters, and the men administer the villages, deciding bride prices, funeral fees, and compensation payments in disagreements. The women cultivate a family garden, cook meals, tend the children, but have little input to decisions, legal actions, etc.; they resent being dominated but at present feel powerless to alter their plight. Cultural factors such as these strongly

influence the approach for health education. In addition, the choice of health education trainees can affect the success of a programme. Native trainees must be chosen with care to ensure that they come from a social stratum or clan that is powerful enough to endow them with sufficient status to influence others and that their characters are strong enough to resist tribal pressures toward tradition. Each student must also be instructed in how to adapt his new health knowledge to the particular society he comes from and where he can find supportive information on culture. (RD)

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

See also: 1448, 1500, 1513, 1546, 1559, 1654, 1670, 1673, 1689, 1719, 1809, 1852, 1870, 1875, 2055, 2086, 2087, 2095

- 1570 Adjou-Moumouni, B., Kacic-Dimitri, M.** WHO, Brazzaville. *Maternal and child health activities within the basic health services.* In An Integrated Concept of the Public Health Services in the African Region, Brazzaville, WHO Afro Technical Papers No.2, 1970, 37-47. Engl. 39 refs.

See also entry 901 (volume 2).

Maternal child health care is an essential component of basic African health services, because mothers and children form two-thirds to three-quarters of the population of some African countries. There is 30-40% mortality before age 5, and 80% of the survivors suffer from chronic diseases. These statistics indicate the need for services that concentrate on reaching pregnant women, women in or following labour, nursing mothers, infants, under-fives, and school-age children. Such services should be integrated into basic health services on a central, intermediate, and peripheral level. In order to qualify as a maternal child health centre, a health centre must provide the following services: care and supervision during pregnancy, supervision of home and maternity ward deliveries, postnatal care, health education, immunization, surveillance of child growth and development, minor treatments, referral of seriously ill patients, and a system of medical records. Many of these tasks can be carried out by auxiliaries. (RD)

- 1571 Assar, M.** WHO, Geneva. *Guide to sanitation in natural disasters.* Geneva, WHO, 1971. 135p. Engl., Fren.

"The aftermath of natural disasters is no less serious than the immediate destruction they cause"; confusion and panic are common elements and the degree of devastation is often inversely proportional to preparatory measures. This guide, therefore, urges the health and relief agencies to plan emergency sanitation measures, suggests some predisaster planning, and details postdisaster measures. Predisaster measures should be geared

to the full use of existing resources and should involve many governmental departments, municipal and local groups, relief agencies, and the public. To prepare for disaster, every government should draw up a relief plan that defines responsibilities of army, police, public services, civil defence, relief bodies, private organizations, etc. Elements that must be considered are equipment and supplies, personnel, transport, living quarters and food supply for relief personnel, and rules and regulations. The first task in a disaster is search, rescue, and evacuation of persons; later measures include the provision of shelter, water supply, waste disposal, vermin control, and burial of the dead. All these tasks have been outlined in this guide, and annexes (1-9) include a list of equipment and supplies that should be stockpiled, a list of sanitarian's equipment, summary of sanitation requirements, an urban water supply questionnaire for waterworks superintendents, and instructions for disinfection of water mains. (AC)

- 1572 Austin, J.E., Levinson, F.J.** *Population and nutrition: a case for integration.* Milbank Memorial Fund Quarterly (New York), 52, 1974, 169-184. Engl. 25 refs.

Because population and human nutrition problems are often interrelated, programmes that coordinate an attack on them are potentially more effective than programmes aimed at either one; for this reason, research should be undertaken on integrating family planning and nutrition programmes. Possible subjects are longitudinal studies of the relationship between child mortality and fertility and of parental attitudes toward declining child mortality. Inquiry into resource savings of integrated delivery systems is also needed as is further research into the effects of pills on lactation and of nutritional status on the retention of IUDs. The authors encourage correspondence from researchers. (AC)

- 1573 Beghin, I.** *Improving nutrition at the local level.* Assignment Children (Geneva), 35, Jul-Sep 1976, 9-23. Engl.

As partial solutions to the problem of implementing nutrition programmes at the local level, the author recommends a single-purpose approach, increased use of auxiliaries, better supervision of auxiliaries and community programmes, and investment by private and voluntary agencies in experimental and innovative projects rather than those aimed at maintenance. Community participation is one goal of improving general nutritional levels, although sometimes it may also be a means to improvement. In most cases, the causes of malnutrition are determined by factors beyond the community's control, and local solutions are either unattainable or mere substitutes for needed social change. Nevertheless, community interest as well as government support is vital to the successful application of any local nutrition programme. Other essentials comprise treatment of the malnourished, especially children; management and prevention of other diseases associated with malnutrition; early detection and diagnosis of malnutrition; nutritional surveillance; related

activities such as environmental sanitation and immunization; increased production of selected foods; increased income; and nutrition education. (RD)

- 1574 Beyer, M.** *Drinking water for every village: choosing appropriate technologies.* Assignment Children (Geneva), 34, Apr-Jun 1976, 12-27. Engl.

A safe water supply can eliminate water-borne diseases and act as a catalyst in other rural development projects, but to be feasible, it must draw on available resources and technologies, and to be successful, it must be accessible and easy to use. Therefore, the design of any project should be adapted to the needs of the population, be realistically conceived, be within national economic and manpower development planning, be preceded by health education of the population, and be adapted to the villagers' ability to operate and maintain it. After a water supply has been installed, it must be protected from pollution and regularly tested for adherence to World Health Organization standards for drinking water. Groundwater is the most important source of water for human consumption, and ways of exploiting it range from hand-dug wells to drilled wells, which are the most common. Surface water, rainwater, and spring water are other sources of drinking water, and each has its advantages and drawbacks. (AC)

- 1575 Bour, H.** *Anémie ferriprive: un problème de santé publique. (Iron deficiency anaemia: a public health problem).* Assignment Children (Geneva), 35, Jul-Sep 1976, 99-103. Fren.

Iron deficiency, which accounts for 80% of the anaemia in tropical countries, is one of the world's leading health problems. It occurs most commonly in conjunction with protein-calorie malnutrition in growing children, menstruating and pregnant women, and anyone suffering from parasitic disease. It results in fatigue, loss of physical strength and the ability to work. It is prevalent in people who depend on diets of cereals, dairy products, and vegetables and, thus far, has not responded to attempts to supplement the iron content in these foods. The reason seems to be that the foods themselves retard the body's absorption of iron. Further research is needed into the biochemical reactions of iron in food processing before methods to prevent iron deficiency anaemia can be discovered. (ES)

- 1576 Bowden, T.L.** *Development of public health in underdeveloped areas.* Journal of the Royal Institute of Public Health and Hygiene (London), 27, May 1964, 131-139. Engl. 23 refs.

For discussion purposes, public health measures in West Africa can be divided into communicable disease control, nutrition, preventive and social, and future activities. The disease control campaigns have been typical: the disease prevalence is determined, the infected are treated, the cause is attacked, and the population is taught to avoid infection. In West Africa, campaigns have been and are being waged against malaria, yaws, trypanosomiasis, schistosomiasis, leprosy, filariasis,

tuberculosis, and cerebrospinal meningitis, but their intensity and effectiveness have varied widely. Nutrition deficiencies and causes have not changed significantly in West Africa since 1939 despite intensive campaigns by UN agencies. Surveys into nutrition have shown that agriculture, ecology, animal husbandry, food preparation, habits, and taboos, as well as widespread parasitism contribute to malnutrition. Preventive and social measures in urban areas approach those offered in many developed countries, but in rural areas they are practically nonexistent. Future requirements for rural health schemes are national initiatives in water supply and sewage disposal, nutrition and food policy, and a comprehensive 10-year development plan. (AC)

1577 Brooke, E.M. WHO, Geneva. *Current and future use of registers in health information systems*. Geneva, WHO, 1974. 43p. Engl. Refs.

The setting up and uses of disease registers have been described in this report. Conditions under which registers may best be established are examined, including certainty of diagnosis, availability of trained staff, adequacy of follow-up, and facilities for data processing and interpretation. The steps to be taken in setting up disease registers are illustrated and the difficulties that arise in their establishment and use are described. Finally, there is an analysis of the replies made by a number of WHO Member States to a questionnaire about their own experiences in developing and using such registers. The author concludes that a disease register can be a very useful tool, e.g., in the evaluation of various kinds of treatment, epidemiology, and the study of the protection and surveillance of sick persons; but she cautions that there may be more economical methods of collecting simple data, e.g., census returns and hospital admission records. (MPM)

1578 Butt, H.W. *Policy strategy and planning of integrated child care programmes for rural areas*. Indian Pediatrics (Calcutta), 10(12), Dec 1973, 691-694. Engl.

Tenth Annual Conference of Indian Academy of Pediatrics, Kanpur, Jan 1974.

Keynote address for symposium on "Delivery of health care to children in India."

Child care programmes in rural areas aim at providing staff and facilities for health care and changing traditional attitudes toward diet, childrearing practices, and environmental sanitation. Although these goals are possible through a variety of approaches, successful programmes usually have several criteria in common: they integrate health education, nutrition, agriculture, and animal husbandry; they are based on educational material suitable for illiterates; they draw on economic incentives; they rely on community cooperation or contribution; and they do not provide services free of charge. Specific objectives of child care projects include training and repeatability. Some examples of possible projects in India are plans to make the auxiliary nurse-midwife responsible for immunization, to improve

dairy farming methods and encourage farmers to provide milk to child care programmes, to promote backyard poultry units, to engage women's groups in packing protein packets, etc. (AC)

1579 China R. Department of Health. *Taiwan's health: 1970 and 1971*. Taiwan, Department of Health, n.d. 136p. Engl.

The problems and achievements of the public health services in the Province of Taiwan during 1970 and 1971 are reviewed. Projects that are highlighted include: a demonstration experiment on improving environmental health and family planning; the implementation of a 5-year maternal and child health project; an intensified health education campaign; a 4-year tuberculosis "accelerated control" programme; a parasite-control programme for schoolchildren; fluoridation of water supplies; etc. Two related phenomena — rural-urban migration, and rapid industrialization — dictate future areas of prime concern: industrial hygiene; environmental sanitation; and drug, tuberculosis, and parasite control. The report, complete with tabulated statistical data, covers public health administration, medical care services; communicable disease control; public health services; the health budget; and vital statistics. (HC)

1580 Colborne, M.J. *Implementation of disease control in Asia and Africa*. Progress Research (Basel), 18, 1974, 43-52. Engl. 13 refs.

The success of disease control programmes has varied from one disease to another, from one country to another, and from one approach to another, but a review of past programmes indicates some bases upon which to forecast success. These depend upon the control measure to be used, an understanding of the epidemiology of the disease, and the practicality of implementing the control method. To date, most successes have been brought about by single-purpose projects; however, the present trend is toward incorporating control measures into the basic health service. Although this approach seems less wasteful of personnel and resources, staff of basic health services often view public health measures as secondary to curative care. Probably the most suitable approach is to combine the two — adopting a single-purpose attack during emergencies but constantly building up the general health services and upgrading the status of public health. This approach will not ensure success, but it will complement a system in which local problems are identified locally. Such a system ensures the mobilization of local resources and allows a disease specialist to concentrate on advising local officials rather than selling the idea of introducing disease control programmes. (AC)

1581 Davey, T.F. *Rural leprosy control problems in Biafra and central India: a comparison*. Leprosy Review (London), 40, Oct 1969, 197-201. Engl.

A comparison of leprosy control in Eastern Nigeria (Biafra) and central India reveals the influence of social factors on the success or failure of a programme. For example, intensive surveys successfully conducted in

Biafra failed in India because of differing loyalty patterns. A strong sense of communal solidarity among the Igbo of Biafra encouraged contaminated persons to step forward, whereas loyalty to the family – who would be embarrassed by having a member infected with leprosy – motivated the Indian sufferer to hide the disease. The following points should, therefore, be taken into consideration in leprosy control planning: the importance of a sociological perspective; the need for adaptability in the leprosy control method; the need for a range of skilled treatment services; and the need to integrate leprosy work with the general health services. (HC)

1582 Donaldson, D. *Rural water supply in Latin America: organizational and financial aspects.* Assignment Children (Geneva), 34, Apr-Jun 1976, 46-57. Engl.

Latin America is firmly committed to providing potable water to its rural populations. The methods that are being used are three: protected spring or well with hand pump; protected spring or well with rudimentary aqueducts for public fountains; and protected spring, pumped well, or treatment plant that pipes water to a storage tank and from there to every house. These correspond to the numbers of persons who will be served: a few scattered families; villages with up to 500 people; and those with more than 500 people, but less than 2 000. The best approach, which gives the most water to the most people at the lowest cost, is that of piped water systems that are built, operated, and maintained with strong local participation. National or regional authorities select communities for introduction of piped water on the basis of five criteria. These include population size, access through roads, community interest, location, and suitable terrain. Once selected, a community is given financial aid (50% international agency, 30% national, and 20% community). Programme promoters assist in organizing a campaign to elect a local water board that will maintain the system and collect water fees. (AC)

1583 Fendall, N.R. *Concepts in organization of family planning programmes in developing countries.* Annals of Tropical Medicine and Parasitology (Liverpool), 67(3), 1973, 251-259. Engl.

Government involvement, cultural change, and efficient use of existing resources are key concepts in the organization of family planning programmes in developing countries. Governments should provide financial aid and legislative action; they should also support public educational campaigns to break down cultural prejudices against contraception and should encourage family planning personnel to be integrated into basic health services. At the local level, such personnel usually comprise newly trained health workers specializing in contraceptive and sterilization procedures or existing nurses and workers who receive supplementary training. The integration of these workers into existing health services, with an emphasis on improving mother and child care, is vital not only for its financial and administrative benefits but also for its message to the

people that contraception does not spell the end of the family. When improvements in child survival accompany family planning promotion, the latter will prove more acceptable, particularly in a society where parents depend on the sons for security in old age. If parents could look forward to old age pensions, they might be more open to a family planning programme, but the impact of pension programmes and other motivational experiments should be evaluated constantly through study of statistics gathered at the local level. (ES)

1584 Fisek, N.H. *Integrated health/family planning program in Etimesgut District, Turkey.* Studies in Family Planning (New York), 5(7), Jul 1974, 210-220. Engl. 8 refs.

In Etimesgut District, Turkey, within the pattern of the Turkish National Health Services an integrated health/family planning programme was launched in 1966, using auxiliary nurse-midwives and general practitioners as the primary change agents. Indicative of the programme's success are a decline in total fertility from 4.9 children per woman in 1969 to 3.7 in 1973, an increase from 11-25% in the use of effective contraceptives over the period 1967-1973, and a decline in infant mortality from 142 per thousand to 93 per thousand over the same time period. This paper presents the author's rationale for integrating family planning with other health services; describes the organizational model for health services as implemented in the study area; discusses the findings of knowledge, attitude, and practice (KAP) surveys in 1967 and 1973; and evaluates the applicability of the model in Turkey and elsewhere. (Modified journal abstract.)

1585 Giel, R., Harding, T.W. *Psychiatric priorities in developing countries.* British Journal of Psychiatry (London), 128, Jun 1976, 513-522. Engl. 36 refs.

On the basis of their research and a series of epidemiological studies carried out in Iran and Ethiopia, the authors cite four types of mental disturbance that should be given priority treatment in developing countries because of their prevalence: psychoneuroses and personality disorders; chronic mental handicaps, such as mental retardation, addiction, and dementia; epilepsy; and functional psychoses, such as schizophrenia and manic-depression. Although mental illness is just as common in the Third World as in developed countries, few patients receive medical attention even when it is available, because most of them are rejected by their families and left to become vagrants and beggars. Only violent schizophrenics tend to be hospitalized, although traditional healers have successfully treated this and other forms of mental illness with herbal remedies and placebos. Because medical care of any kind is at a premium, the all-encompassing basic health worker must be trained to recognize and treat mental illness as part of his regular duties. The authors have provided outlines and flow-diagrams of the instructions that could be given to auxiliaries to enable them to deal with attacks of epilepsy and acute and subacute psychoses as well as suggestions for applying this methodology to

other mental health problems. With regard to the establishment of minimal mental health services, the authors also stress the need for a referral system, accurate medical records maintenance, and a limited repertoire of drugs, which would allow bulk-buying of two or three of the most essential medicines in order to reduce costs. (RD)

- 1586 Gray, R.H.** *Breast feeding and maternal and child health.* IPPF Medical Bulletin (London), 9(6), Dec 1975, 1-3. Engl. 38 refs.

The shift from breast-feeding to artificial feeding is a result of complex socioeconomic factors and can be reversed only through concerted efforts; a recognition of the medical advantages, which include protection from infection, perfect nutritional content, and sterile packaging, is not enough. In both developed and developing countries, economic pressures, such as the general lack of extended maternity leave, militate against breast-feeding, but the effects of artificial feeding are much less devastating in developed societies. Efforts to support breast-feeding must counteract the move toward more modern measures brought about by advertisers who have succeeded in promoting artificial feeding as sophisticated, convenient, and aesthetically clean. (AC)

- 1587 Hall, B.L.** *Revolution in rural education: health education in Tanzania.* Community Development Journal (London), 9(2), Apr 1974, 133-139. Engl.

A mass health education campaign was undertaken in Tanzania after three smaller campaigns had demonstrated the effectiveness of the radio in communicating with rural areas. The campaign was launched through joint cooperation of all the national agencies responsible for education, health, and rural development. Messages were broadcast by radio programmes, and printed materials, including pamphlets and posters, were distributed. Seventy thousand group leaders attended seminars on the value of discussion as a learning method. These leaders were members of local communities and were recruited through contacts in local governments, radio announcements, adult education organizers, and interested groups. Manuals, which contained information on conducting meetings, broadcast times, topics of discussion, and resources, were drawn up for their use. The campaign was aimed at malaria, hookworm, dysentery, tuberculosis, schistosomiasis, and water-borne infections; some of the activities that were encouraged included filling in stagnant pools or swamps, destroying snails, clearing vegetation from around houses, and constructing latrines. The campaign stressed that each group should effect one permanent change. Evaluation is planned to examine organizational efficiency, knowledge imparted, and changes in health behaviour. (AC)

- 1588 Hall, S.A.** *Rural workers' attitude to family planning in East Africa.* In *Whither Rural Medicine?* Tokyo, Japanese Association of Rural Medicine, 1970, 214-217. Engl.

Fourth International Congress of Rural Medicine, Usuda, Japan, 30 Sep-4 Oct 1969.

A simple mathematical model links attitudes in East Africa toward family size with high mortality and lack of security in old age. The model, when applied to the results of two surveys on attitudes, shows the relationship between the desired number of children and the intention of having one son survive to provide the parents with security in old age. If the male child mortality is m , the probability of having one son survive to adult life for any given number (r) of sons born is $(1-m)^r$. At mortality levels prevalent in East Africa (.25), the model indicates the target would be approximately three sons; however, a survey of 774 rural women in six tribal areas of Kenya showed that the desired number of children was six. This difference can easily be related to the probability of having a son or a daughter at each pregnancy (.50). A model such as this indicates that spending concentrated on basic health services could improve attitudes toward family planning and that services for family planning should be low-key and integrated in basic health services. (AC)

- 1589 Hasan, G.** *Population control in rural India and its critical assessment.* Bangalore, Rural India Health Project, 1974. 10p. Engl.
World Population Conference, Bucharest, Rumania, 21 Aug 1974.
Unpublished document.

Because the success of family planning programmes in India depends on their acceptance in the rural areas, the Indian government should direct its efforts toward the rural population to eradicate the illiteracy, unemployment, malnutrition, and superstitions that contribute to the failure of present programmes. The most valuable tools are comprehensive community health programmes that integrate family planning with health, immunization, nutrition, and mother and child care services. But government alone does not have sufficient manpower and resources to develop such programmes. For this reason, it should provide financial and legislative aid to voluntary organizations already working in rural areas, and these organizations themselves should supervise management and spending. Only through such integrated efforts can government and voluntary international organizations effect successful family planning programmes in rural areas. (ES)

- 1590 Hasan, G.** *Motivation of family planning in rural areas.* Bangalore, Rural India Health Project, 1972. 5p. Engl.
International Conference on Family Planning, New Delhi, India, 1972.
Unpublished document.

In India, family planning campaigns have thus far failed to appeal to the villager within his own frame of reference and value structure, and therefore, they have been unable to convince him that fewer children are desirable. Because of the diversity of religions, languages, and cultures among the rural population, a variety of campaign strategies are needed, but they

should all follow some general rules. One rule is that the aid of village elders should always be enlisted. They are important allies who may influence family members other than an acceptor — for example, they may be the deciding factor in cultures where a woman is not allowed to practice any form of birth control without the consent of her husband and mother-in-law. Cash payments, which are usually frittered away, should not be used as incentives for sterilization, but long-term rewards, such as complete immunization of children up to age 7, food supplements for malnourished children, or rebates on consumer goods and grains, should be offered. Furthermore, arbitrarily determined norms for sterilization operations should be abandoned; they are ineffective and often self-defeating. A mother's age in relation to the size of her present family should be the crucial factor in deciding the most suitable birth control measure. (RD)

- 1591 International Development Research Centre, Ottawa.** *Demography and health.* In Herrera, A.O., Scolnik, H.D., Chichilnisky, G., Gallopin, G.C., Hardoy, J.E., Mosovich, D., Oteiza, E., de Romero Brest, G.L., Suarez, C.E., Talavera, L., Castastrophe or New Society? A Latin American World Model, Ottawa, International Development Research Centre, 1976, 49-53. IDRC/064e. Engl.

An economic model for Latin America includes a sub-model for population and health that isolates "life expectancy at birth" as the most effective indicator of population growth (inverse relationship) and well-being (direct relationship). The submodel linked socioeconomic factors with demographic variables through mathematics including multivariable, linear, and nonlinear analyses. Socioeconomic factors included numbers of persons employed in agriculture, numbers of persons employed in the secondary sector, school enrollment, houses per family, daily caloric and protein intake per person, and urbanization. Demographic variables included life expectancy at birth, birthrate, and average family size. The socioeconomic factor that most adversely affected life expectancy at birth proved to be employment in agriculture; when the effects of this factor were deleted, the highest life expectancy achieved was 75.6 years — a realistic biological limit. The results of this analysis indicate that improvements in basic needs in the agricultural sector (rural populations) — and thus improvements in life expectancy — may limit population growth more than do programmes to promote family planning. It is suggested, therefore, that investments be linked with life expectancy and their effect on it calculated so that spending can be rationalized. (AC)

- 1592 International Planned Parenthood Federation, Kuala Lumpur.** *Starting a new clinic.* Kuala Lumpur, International Planned Parenthood Federation, Southeast Asia and Oceania Region, May 1970. 20p. Engl.

This handbook has been compiled to assist health personnel to set up family planning clinics in South East Asia and Oceania. Factors in choosing a location and deciding how frequently to hold sessions are discussed, and these include ease of access and size of population. Minimal and optimal requirements are presented for space, furniture, equipment (clinical and office), drugs, linen, and staff, and the clinical procedures and record-keeping activities of four types of personnel — nurse, clerk, social worker, and supplies nurse — are listed. Also, an easily constructed, wooden lithotomy couch (for pelvic examinations) is illustrated. (HC)

- 1593 Iturbe, P.** *Personnel requirements in an integrated tuberculosis program in developing countries.* Bulletin of the International Union Against Tuberculosis (Paris), 43, Jun 1970, 149-161. Engl.

An infrastructure for integrating tuberculosis control programmes into overall health services is proposed. At the national level, a tuberculosis division, which includes a research institute, would be one of the branches of a Department of Chronic Diseases. The department would be under the Public Health Director who, in turn, would report to the Minister of Health. Personnel for the TB division would include a chief physician and a team of assistants who would be responsible for the training and supervision of personnel at the regional level. The regional health service would be directed by a person with a master's degree in public health. His duties would be to coordinate resources for the entire region, and he would be advised by a committee of representatives of all the funding organizations within the region. Several sanitary districts would be responsible to the regional director. In rural areas, a health centre would correspond to this level, and it would be responsible for the training and supervision of auxiliary health personnel who staff rural health posts. At every level, special training for TB prevention, diagnosis, follow-up, and management would be undertaken. The functions of different personnel are discussed. (AC)

- 1594 Jelliffe, D.B., Jelliffe, E.F.** *Dyadic nature of mother and child nutrition.* Assignment Children (Geneva), 35, Jul-Sep 1976, 104-109. Engl.

Because an infant depends on its mother for nutrition in both the foetal and early stages of life, maternal malnutrition robs the newborn of needed proteins and calories. Recent studies, however, have shown that, even in poorly nourished communities, human milk is adequate as the sole source of food for the first 6 months of life. Breast-feeding continued through the 2nd year of life provides important nutritional supplements to the child's diet and produces a contraceptive effect that is important for replenishing the mother's reserves and limiting population growth. In poor communities, the increasing use of bottle-feeding often leads to infantile marasmus, diarrheal disease, and kwashiorkor, and in affluent ones, to infant obesity, cow's milk allergy, and metabolic abnormalities. Thus, all people gain by following the scientific, biological

approach to infant feeding, placing emphasis on the diet of the pregnant and lactating mother during the first 6 months of life and gradually introducing locally produced, solid foods. Rational, feasible, and low-cost, this approach will have a widespread effect on infant morbidity everywhere. (ES)

- 1595 Jelliffe, D.B., Bennett, F.J.** *Nutrition education in tropical child health centres.* Courrier (Paris), 10(9), Oct 1960, 569-573. Engl. 10 refs.

Some practical guidelines for planning, implementing, and evaluating nutrition education programmes are discussed. The aim of such programmes is to help mothers appreciate and adopt the best child-feeding practices possible under local conditions. The planning stage comprises a diagnosis of community nutrition; an investigation into local customs, practices, and attitudes toward foods and infant feeding; an assessment of community "educability," i.e., the extent to which local ideas and behaviours are modifiable; definition of the aims and scope of the programme; and identification of appropriate content and delivery. The importance of basing nutrition education on the local pattern of food consumption is stressed. Various approaches to implementation include singling out "opinion leaders" for incorporation into group sessions and approaching individual families (this approach is particularly important in a male- or mother-in-law-dominated household). Demonstrations such as the use of scales to show weight as a nutritional indicator are an important teaching method. Evaluation of results of nutrition education is difficult, but indicators are quality and quantity of audience participation during sessions; the "ripple effect" of knowledge from a mother to her neighbours (ascertained by means of a questionnaire); observed changes in behaviour; and, ultimately, improvement in child nutrition. (HC)

- 1596 Martens, E.G.** Canada, Department of National Health and Welfare. *Teaching health in Indian schools.* Ottawa, Department of National Health and Welfare, n.d. 6p. Engl.

These notes are intended to be of assistance to planners and teachers of school health education programmes, especially in the Indian schools of Canada. The first task is to determine the particular health needs of the children by checking medical records, meeting parents, talking to the children, and surveying the health needs of the community as a whole. The range of health subjects to be discussed will probably include personal cleanliness, food and nutrition, dental care, control of communicable disease, fitness, safety and first aid, and community health. The teacher should realize that in addition to direct instruction in these subjects, the healthful living of the children can be influenced favourably by many different kinds of learning experience — the cleanliness and safety of the school environment, the health of the teacher, the routine visit by the school nurse. In fact, the teacher should capitalize on every opportunity to put health education theory into practice. Appended to these notes is a list of resource

material available in Canada to assist teachers in planning and implementation of their school health programme. (MPM)

- 1597 McDermott, W.** *Environmental factors bearing on medical education in the developing countries. Modern medicine and the demographic-disease pattern of overly traditional societies: a technologic misfit.* Journal of Medical Education (Chicago), 41, 1966, Suppl., 137-162. Engl. 31 refs.

Accumulated medical knowledge can be applied to health problems in developing countries, but an examination of disease patterns and relevant experience is prerequisite. One of the most important disease patterns is high infant mortality, which is due mainly to respiratory tract and diarrheal diseases. The situation resembles that in New York (USA) around 1900-1930. At that time, the disease phenomena were controlled by intensive community development. Measures included water supply chlorination, milk pasteurization laws, "milk kitchens," visiting nurses, early well-baby clinics, and major campaigns against illiteracy. Of course, the cultural and social milieu in 1930 New York differed greatly from that in present developing societies, and those differences prevent widescale transfer of reform techniques. It is worth noting, however, that control is possible through interventions in nutrition, environmental health, and education. It is also worth noting that the bacteria and viruses causing high infant mortality are present everywhere today but that a child in a developed country does not suffer simultaneously from many diseases nor does he usually contract communicable diseases at the most vulnerable age (birth to 5 years). In a developing country for a child to enjoy the protection provided by age and disease dispersal, birthrates must be reduced. However, efforts directed only toward promoting family planning are impractical, because parents do not accept the relationship between birthrates and mortality. Successful intervention into the process will come through nutrition and environmental health programmes. (AC)

- 1598 McDowell, J.** *Education nutritionnelle et aliments locaux africains. (Nutrition education and local African foods).* Assignment Children (Geneva), 35, Jul-Sep 1976, 24-30. Fren.

The failure of many nutrition education programmes in Africa is due, not to the ignorance of African women, but to the refusal of nutritionists to recognize the value of vegetable foods and to encourage the use of combinations of indigenous roots, cereals, and plants that will provide a balanced diet. In the past, nutritionists have insisted on the importance of animal foods and have disregarded the high costs and scarcity of meat, fish, and eggs, which make their use virtually impossible for most Africans. Simple improvements in the traditional methods of harvesting and storing grains and other vegetables would increase the amount of food available, and the use of these local foods in nutrition programmes would attract the peoples' interest and

acceptance — an important victory in the fight against malnutrition. (ES)

- 1599 McDowell, J.** *In defence of African foods and food practices.* Contact (Geneva), 32, Apr 1976, 5-10. Engl. Refs.

Appeared also in Tropical Doctor (London), 6(1), Jan 1976.

The traditional African diet contains all the elements necessary for adequate nutrition at low cost; the fact that 70% of children are adequately nourished attests to the quality of the food. The 30% of children who are malnourished represent a breakdown in traditional practices, not proof of poor traditions. A combination of groundnut flour and cassava is more nutritious and less costly than a combination of maize and egg; 50 g of groundnut provides as much amino acid as does a 50 g egg, while providing more calories and tryptophan. In addition, groundnut supplies the antipellagra vitamin, niacin, that is so important to maize diets. Groundnut, cassava, millet, sesame, and legumes — traditional crops in Africa — are already produced in sufficient quantities to supply all Africans with the nutrients they require; however, much of the harvest is spoiled each year because there are no low-cost, efficient methods for conserving it. It would appear, therefore, that the need in Africa is for capitalizing on available crops. Agriculture experts should devote their time to devising methods for preserving the crops; nutrition educators, to combining available foods effectively; and health workers, to preventing communicable diseases, which predispose children under 5 to malnutrition. (AC)

- 1600 Morley, D.** *Paediatric priorities in the developing world.* London, Butterworths, 1973. 470p. Engl. 328 refs.

Socioeconomic realities in the developing countries demand a setting of priorities in health services. One system of setting priorities is a process of weighting four criteria: community concern, prevalence of problem, seriousness, and susceptibility to management. When priorities are set, efficient methods for approaching them can be devised. Some approaches to care of the newborn, early nutrition, health record maintenance, and identification and care of the at-risk child are detailed in this publication. Specific diseases that are comprehensively described by the author include diarrhea, acute respiratory infections, severe measles, whooping cough, malaria, tuberculosis, skin disorders, and anaemias. A chapter on the under-fives' clinic constitutes information on its objectives, essential activities, its building, record systems, interpersonal relationships, consultations, patient flow, health education, and possible economies. There are also separate discussions on communications, management, and nursing. (AC)

- 1601 Mumford, N., Coles, R.W.** *Family planning and mobile under-fives clinics.* Journal of Tropical Medicine and Hygiene (London), 78(12), Dec 1975, 267-268. Engl.

An intensive family planning education campaign was carried out in the mobile baby welfare clinics offered by a large rural hospital (Nixon Memorial Methodist Hospital, Segbwema) in Sierra Leone. While certain factors — an under-five mortality of 40% and the need for unpaid child labour — militate against family planning, 37 IUD acceptors were recruited. One year later, 33 of these mothers still had their IUDs; of the four who did not, two had removed them because of pain and two because of a desire for more children. Average parity of these mothers was 8.8. Based on this experience, it was concluded that IUD insertion is practical as part of the mobile baby welfare clinic but that while the Mende have accepted family planning as an indefinite rest from childbearing for an elderly multiparous mother, they have yet to accept it for spacing purposes in a young mother. (HC)

- 1602 Niameogo, C.** *Monitrices de bouillies en zones rurales de Haute-Volta. (Child nutrition auxiliaries in rural zones of Upper Volta).* Assignment Children (Geneva), 35, Jul-Sep 1976, 31-40. Fren.

A nutrition programme in a rural province in Upper Volta, which was initiated in 1972 to control the high child mortality (36%), has successfully rehabilitated more than 1 500 children and has recruited many of the mothers into providing nutrition advice to neighbours. Six centres for treatment and education have been established, and they offer public health and nutrition courses to teachers, family counselors, public servants, and medical students. They treat patients referred by mobile medical units and maternal child health clinics, and provide the patients' mothers with training in preparing nutritious weaning foods derived from local products and recognizing symptoms of malnutrition and other common diseases. Mothers also learn principles of child development, nutrition, hygiene, and sanitation. On their return home, they serve as nutrition auxiliaries and pass on nutrition information to other mothers. The health of the cured children provides a significant incentive to practice the principles taught. Of 2 033 sick children treated between 1972 and June 1976, 70% were completely cured, 20% are recuperating, and of the 10% who died, many were too ill on admittance to survive. Moreover, the activities of the nutrition auxiliaries in improving health practices have caused the virtual disappearance of the most serious type of marasmus. This programme provides a feasible, low-cost approach to the eradication of malnutrition and disease in the sub-Saharan countries. (ES)

- 1603 Pan American Health Organization, Santiago.** *Planificación de la salud, la alimentación y la nutrición. (Health planning, food and nutrition).* Santiago, Latin American Institute of Economic and Social Planning, Feb 1970. 12p. Span. 13 refs.

Malnutrition is widespread in Latin America — about half the childhood population suffers from protein-calorie malnutrition, and the productivity of workers is greatly reduced by susceptibility to infectious diseases

caused by inadequate nutritional intake. Although malnutrition is a health problem, its causes originate outside the sphere of action of the health sector, and it can only be eradicated through a coordinated effort on the part of various sectors governed by aggressive national policies. Such policies would form a part of each country's development plan and would call for such things as direct intervention in the market to ensure that an adequate food supply is made available at reasonable cost to the population; education of the populace in favour of more nutritious foods; etc. Meanwhile the public health sector should concentrate most of its resources on the fight against malnutrition while bringing its influence to bear on the government. Further considerations regarding policymaking (such as that of identifying "at risk" groups) are outlined. (HC)

- 1604 Parillon Delgado, C.** *Produccion alimentaria a traves de huertos comunitarios en Panama. (Community food production experiment in Panama).* Assignment Children (Geneva), 35, Jul-Sep 1976, 92-98. Span.

The Ministry of Health in Panama has recently organized a food production programme designed to modernize traditional agricultural techniques and practices, teach homemakers the fundamentals of nutrition, improve the basic diet of families, and raise nutritional levels. To encourage local participation, the government provides supplies, equipment, and technical expertise for 3-year community projects. Each project in the programme consists of the cultivation of a community garden as the first phase, followed by the raising of either poultry, goats, fish, rabbits, or hogs for supplementary protein. The communities selected for the projects must have a health committee composed of local residents to distribute the produce in an equitable fashion, available land, available water, 20 or more participating families, and easy access from the outside for visiting government experts. Although 140 community projects have been undertaken so far, they have not yet been formally evaluated. (RD)

- 1605 Pines, J.M.** *Supplementary feeding and cost-effectiveness analysis.* *Cajanus* (Kingston, Jamaica), 9(1), 1976, 32-38. Engl.

Supplemental feeding could be a valuable tool for preventive medicine — immunization against malnutrition; however, it is normally regarded as a stopgap measure for the rehabilitation of malnourished children. Although proper feeding habits within the home are to be preferred, supplemental feeding, which is given to at-risk children between ages 6 months and 3 years, can demonstrate to parents the benefits of proper feeding and can ensure against malnutrition. Costs of such programmes would be offset by the savings in morbidity, mortality, and hospitalization and rehabilitation of children suffering from acute malnutrition. Additional savings would result if socioeconomic factors encouraging malnutrition could be identified so that at-risk children could be readily recognized and treated early. (AC)

- 1606 Polgar, S., Kessler, A.** WHO, Geneva. *Introduction to family planning in the context of health services.* Geneva, WHO, Aug 1968. 50p. Engl. 172 refs.

Although family planning services may include provision of birth control methods, marriage counseling, and infertility testing, or be integrated into the health services, they are often limited to providing birth control measures. This may be due partly to the tendency of governments to set targets for family planning services in terms of reduced birthrates. Viewing family planning only as a means to population control limits its appeal to the population at risk and excludes the benefits of combining family planning with maternal child health or family health services. Methods of integrating family planning with health services vary throughout the world and range from providing stipends to private physicians for IUD insertions (Korea and Taiwan) to encouraging family planning through outpatient clinics, mobile health teams, and community workers. In some places, commercial channels and volunteer family planning promoters extend coverage. The training for family planning personnel depends on the sophistication of the trainee and on the objective of the training, and the methods for evaluating training should also reflect these criteria. Evaluative mechanisms are essential elements not only of training but also of programmes for family planning. Some evaluation techniques are analyzing patient charts that can be automatically processed (USA and Singapore), examining statistics on incidences of illegal abortions and complications due to inadequate birth spacing, and monitoring birthrate. (AC)

- 1607 Radford, A.J.** *Some comments on priorities in health planning and future nutrition policy.* 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, 138-150. Engl.

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

The author discusses nutrition policy in Papua New Guinea and recommends some changes in research direction and health planning. He opines that nutrition research into the development of processed protein supplements should be abandoned because the protein available in leafy vegetables, beans, and inexpensive tinned fish is adequate. Research should be directed, rather, toward nutrition education — convincing the highlander to eat fish and to alter detrimental habits, such as refusing to feed leafy vegetables to small children. Nutrition rehabilitation units, which are expensive to operate, should be used primarily for training purposes, and simple day centres should be established at the peripheral level. Locally available foodstuffs should be promoted, and at the national level, agricultural experimentation into the production of peanuts, high protein vegetables, rice, etc., should be encouraged to reduce the country's dependence on imports.

Further, the author recommends that authorities develop a less capital-intensive design for health centres; standardize health centre equipment; simplify the current accounting system; replace highly paid expatriates by locally trained people; and allocate more resources to family planning. Finally, he recommends that intensive research be devoted to involving local health authorities in the redistribution of resources and to decreasing the prevalence of the major endemic diseases. (HC)

- 1608 Riveron Corteguera, R., Ferrer Garcia, H., Valdes Lazo, F.** Pan American Health Organization, Washington, D.C. *Advances in pediatrics and child care in Cuba, 1959-1974*. Bulletin of the Pan American Health Organization (Washington, D.C.), 19(1), 1976, 9-24. Engl. 30 refs.

This article describes the major activities carried out since 1959 in the field of pediatrics and child care in Cuba. In particular, it notes the improvements made through establishment of a national health system and through the participation of community organizations (the Federation of Cuban Women, Committees for the Defense of the Revolution, associations of small farmers, and trade unions) and shows how perinatal, infant, and child mortality have been significantly reduced. As of 1973, perinatal mortality had fallen to 27.9 deaths per 1 000 live births, infant mortality to 27.4 deaths per 1000 live births, preschool mortality to 1.2 per 1000 children, and school-age mortality to 0.4 per 1000 children. This report also cites data on available physical and manpower resources and outlines a large range of activities linked to a comprehensive child care programme undertaken in 1967. This programme, in which newborns are enrolled upon leaving the maternity hospital, encourages breast-feeding, promotes the activities of well-baby clinics, provides special examinations for malnourished infants, provides health care for preschool and school-age children, promotes pediatric medical visits to the home, assists with camps for asthmatic and diabetic children, provides pediatric services at pioneer and other camps for schoolchildren, carries out health education activities, and combats communicable disease. In particular, activities to prevent communicable disease appear responsible for a good part of the progress achieved to date. As a result of these activities malaria and diphtheria have been eradicated, poliomyelitis has been overcome, and the incidences of tuberculosis, tuberculous meningitis, tetanus (among both newborns and children under 15), and acute diarrheal disease have been substantially reduced. (Journal summary.)

- 1609 Samson, S.** *Patient motivation in rural clinics*. Christian Nurse (Nagpur, India), 218, Jun 1968, 16-19. Engl.

An Indian doctor opines that reluctance on the part of the rural dweller to accept family planning is the result of misconceptions and fears rather than absence of knowledge; she points out some of the essentials of a family planning campaign, and describes an approach

that has proved effective. It is conducted by health centre personnel and is based on personal contact with individuals and small groups as opposed to "mass meetings." The approach comprises five components: a preliminary contact survey to gather fertility data and to establish rapport with interested couples; small group meetings to dispel fears and misconceptions; a good doctor-patient relationship in the clinic; maternal and child services to make the parents more secure about the survival of the children they already have; and regular, conscientious follow-up. Specific educational programmes and teaching techniques used in one rural health centre are briefly outlined. (HC)

- 1610 Scoullar, B.B., Konedobu, D.A.** *Promoting better nutrition in rural areas of Papua New Guinea*. Science in New Guinea (Boroko), 2(1), Apr 1974, 39-44. Engl.

One reason that nutrition activities in the Papua New Guinea Highlands have been unsuccessful so far is the failure to take into consideration the existing culture. Until recently, the principal goal has been the education of the women, when in fact it is the men who make the decisions about the growing of food and consequently determine what the family will eat. To be effective, nutrition programmes should aim to motivate both parents by building on recognized goals, preferences, and attitudes. Parents who do not normally consider malnutrition a disease should be allowed to observe their hospitalized child's response to nutritionally adequate meals. Another approach would be to make meals better balanced and more palatable at the same time, perhaps by encouraging the increased use of protein-rich legumes and the cooking of food in oil. It should be remembered that a rural population will reject any health innovation that is not introduced within the framework of the existing culture; the advantages (in their terms) of adopting this innovation should also be immediately apparent. (RD)

- 1611 Sutedjo, R.** *Organization of mother and infant care services (urban) in Indonesia*. Paediatrica Indonesiana (Jakarta), 14(9-10), Sep-Oct 1974, 143-147. Engl.

The author traces the origins and development of maternal and child health (MCH) services in Indonesia, especially in Jakarta. Across the country there are about 6 500 MCH centres, but these are intended to provide only preventive services, e.g., antenatal care, nutritional advice, and immunizations; curative treatment has to be obtained from the small number of government hospitals. In response to the needs of the rapidly increasing population of Jakarta (from 300 000 to 5 million in 30 years), regional hospitals were introduced into the city, but the level of health care was still considered to be inadequate. Consequently, as a pilot project, a few health centres (incorporating the local MCH centres) have been introduced to provide comprehensive preventive and curative services, usually for a population of between 30 000 and 50 000. At present in Jakarta there are 5 regional hospitals, 27 district health

centres (each headed by a doctor), and 69 health sub-centres, supervised by senior midwives; in addition, there are still 139 MCH centres. The effect of this new system on mother and child care has not yet been evaluated. (MPM)

- 1612 Tejada de Rivero, D.A.** *Pan American health planning program.* American Journal of Public Health (New York), 65(10), Oct 1975, 1052-1057. Engl.

The Pan American Health Planning Program, which was created in 1970 to strengthen health planning in Latin America, provides advisory services, training, research, and information services. The programme's training component includes international and national courses in health planning, various levels of seminars, and in-service training; the research component tests mathematical models, such as the "link model," to determine their applicability to health planning. The information service prepares manuals and methods for health planning and maintains documentation. The structure, budget, and functions of the health planning programme are illustrated. (AC)

- 1613 White, G.F.** *Domestic water supply: right or good?* In Elliott, K., Knight, J., eds., Human Rights in Health, London, Associated Scientific Publishers, 1974, 35-51. Engl.

Rural and urban peripheral dwellers in developing countries are the main targets for programmes to provide a basic human right — safe water supplies. Obstacles to programmes include the volume of water available; the need for improved technology to utilize the supply; the costs of such technology; the lack of personnel capable of effective planning, construction, and operation of water works; the costs of training engineers; and the resistance and lack of motivation of the people using the system. Although numerous, these obstacles can be overcome with international aid and cooperation. Using the technical expertise of developed nations, international agencies such as WHO could provide the initial financial aid, technological research and assistance, and administrative infrastructure to realize basic water supplies throughout the world within 25 years. They could assess attitudes at local levels and design public education and technical training accordingly. The financial investment necessary would be amply repaid by the improved health and productive capabilities of the world population. (ES)

- 1614 Whiteman, J.** *Cultural factors influencing nutrition education.* International Journal of Health Education (Geneva), 10(1), 1967, 43-47. Engl.

This article deals with different family groups and their socioeconomic impact on life, including methods of agriculture and eating habits. It stresses the need to understand factors that contribute to the social value of food in order to understand the eating habits of people in any society. The positions of responsibility within family groups differ from society to society, and the responsibility for child-rearing varies. Thus, changing methods of upbringing or other practices essentially

means remodeling family structures. This applies to agriculture as well, especially when land is communally owned and food is a source of wealth. (BB)

- 1615 WHO, Geneva.** *Health education in health aspects of family planning.* Geneva, WHO Technical Report Series No.483, 1971. 47p. Engl.

Planning an education programme so that populations can reap the maternal child health benefits of family planning is the subject of this report by a WHO study group. The objectives of education include creating an atmosphere where family planning is advocated, representing health benefits in ways that are culturally valued, and emphasizing the importance of continued family planning. Steps in planning an appropriate programme progress from formulating objectives for the family planning programme and for the educational component; through discovering present knowledge, attitudes, and practices of the population to be served; to designing a plan of operations and evaluation. The plan of operations should contain a training component, and curricula planning should focus on the functions of the worker, the specific tasks within the functions, and the information needed to perform the tasks effectively. Evaluation of effectiveness of a programme in meeting its objectives requires that precise objectives be established, evidence of accomplishment be defined, and baseline data be collected before introduction of the programme and at evaluation time. Teaching methods, materials, and aids are discussed, and group recommendations are set forth. (AC)

- 1616 WHO, Geneva.** *Nutrition at the local health service level in Latin America.* WHO Chronicle (Geneva), 24(12), Dec 1970, 569-574. Engl.

A conference convened by PAHO to discuss ways in which local health services can improve their nutrition activities is reviewed. At the regional level, specialists in nutrition should be responsible for the planning, organization, supervision, and evaluation of nutrition programmes within the overall regional health plan (e.g., nutrition education, advisory services, staff training, research). At the local level, however, nutrition activities will depend on the types of health service and manpower available. Three types of local health service can be distinguished: the district, which is the most completely organized; the rural municipality, supervised by a medical practitioner and auxiliary staff; and the village, where a nursing auxiliary provides only the simplest care. Nutrition activities that can be conducted at each of these are described under the headings of diagnosis, treatment, protection of special groups, and nutrition education. Greater effectiveness in the planning and carrying out of nutrition work requires greater stress on training by professionals, programme evaluation based on objective parameters (e.g., birth weight, mortality, child height), and closer coordination with other activities in the health field. It is also

acknowledged that measures to improve nutrition cannot be taken in isolation from other public health measures — improvements in water supply and waste disposal, disease control, family planning, MCH services, etc. (MPM)

1617 World Bank, Washington, D.C. *Village water supply: a World Bank paper*. Washington, D.C., World Bank, Mar 1976. 96p. Engl.
Meeting the United Nations' goal of providing safe water to one quarter of rural inhabitants by 1980 will cost an estimated \$3 000 million, but if the programmes are soundly based on experience, the investment will eliminate water-borne diseases, promote rural development, and improve the quality of life. At present, problems in rural water supply programmes are those of financing, securing suitable personnel, and founding adequate institutions; specifically, these include lack of government policies for water supply, lack of trained manpower, low village incomes, failure to collect adequate charges from users, frequent failures in supply systems due to poor maintenance procedures or lack of spare parts, etc. To reduce technical problems to a minimum, four general principles can be applied to most village water programmes: groundwater, which requires little or no treatment to make it safe, is preferable to surface water; systems must be rugged and simple to use and maintain; spare parts must be readily available; and standard designs, which can be modified to meet local conditions, should be developed and used for cost estimation, procurement, and construction.

Factors that influence the selection of a village for water supply include community interest and willingness to contribute labour and money; prevalence of water-related disease and quality of existing water supply; village potential for growth; existence of village institutions; and estimated cost of the system.

1618 Yankauer, A. Pan American Health Organization, Washington, D.C. *Health care program for mothers and children*. Washington, D.C., Pan American Health Organization, Scientific Publication No.130, 1966. 106p. Engl.

Because high maternal and child mortality in Latin America can be traced indirectly to education, economics, agriculture, environment, etc., public health administrators who wish to improve maternal and child health (MCH) should explore the development activities of all sectors and channel them toward pregnant women and children. This should be possible after a study of major health problems and the resources for treating them in a community. In the health sector itself, public health administrators should ensure that only minimal MCH services aim for 100% coverage — screening, simple treatment routines, and education. Then, sophisticated services can focus on high-risk patients. The pool of health manpower available for MCH includes midwives, physicians, nurses, and *parteras empiricas* (traditional midwives). In the rural areas, especially, the traditional midwives should be encouraged to practice their art but to use basic sterile technique and to recognize and refer high-risk women. (AC)



A community nurse demonstrates how to prepare baby food in a rural village in Malawi.

III. Primary Health Care – Implementation

III.1 Rural Inpatient Care

See also: 1501, 1655, 1750, 1789, 1804, 1998, 2072

- 1619 Auchincloss, J.M., Grave, G.F.** *Problem of burns in Central Africa*. Tropical Doctor (London), 6(3), Jul 1976, 114-117. Engl.

A doctor discusses some features of burn management as carried out in the "burn isolation unit" of an 800-bed hospital complex serving 2 million Africans in Western Rhodesia. Burns, which are prevalent in Central Africa, are mainly due to the use of open fires for cooking, and most victims – admitted at a rate of 20 per month – are infants and children. Management of a burn patient begins with history taking (age and sex of patient, aetiology of burn, etc.); this record serves as a basis for correct treatment and as a source of statistical data. The burn is then compared to a suggested list of criteria to determine whether or not it qualifies the patient for inpatient treatment. Both outpatient and inpatient treatment are described in clinical detail with emphasis on those procedures found to be particularly appropriate to the local climate. A simple body chart, which is used to record the area of burn, contains the formula for calculating the volume of fluid loss. Because most burns are preventable, an attempt is being made to educate rural women in accident prevention, but the author feels that this approach will take a long time to produce tangible results. An example of the body chart is included. (HC)

- 1620 Calvert, L.B.** *Family health: a self-help programme*. Papua New Guinea Medical Journal (Konedobu), 17(2), Jun 1974, 183-185. Engl.

Health practices at the Kapuna Hospital, Gulf District, Papua New Guinea are designed to encourage the relatives of patients to take an active part in the care of their sick. Since hospital facilities (beds, kitchens, etc.) are roughly equivalent to those at home, relatives are able to feed, wash, and care for the patient in a familiar context. Midwifery practices combine the advantages of village delivery with the safety of hospital delivery – the new mother is constantly accompanied by a relative, examination and procedures are reduced to a minimum, and the family takes full care of the newborn as soon as it leaves the delivery room. Simple treatments (e.g., for scabies) are administered by the patients themselves, and mothers, under supervision, treat their

dehydrated or malnourished children and keep the only copy of their child's health record. These self-help policies are highly recommended as a means of helping people to achieve a greater degree of medical independence. (HC)

- 1621 Gregson, G.K.** *Maintenance of hospital equipment in Malawi*. Moyo (Blantyre), 5(3), Dec 1973, 17-20. Engl.

In Malawi, workers in four regional workshops repair equipment for hospitals, clinics, and health centres; they also make crutches and simple tools. Common repairs range from replacing wheels on trolleys and wheelchairs to replacing faulty seals and pressure gauges in autoclaves. Some means of preventing equipment breakdown are set forth; these include defrosting refrigerators monthly; ensuring windows and doors are closed when air conditioning units are running; and maintaining correct water levels in sterilizers. (HC)

- 1622 Hollway, J.** *Survey of church related hospitals in the Anglican province of Uganda, Rwanda, and Burundi*. Kampala, Uganda Church Press, 1970. 124p. Engl.

This survey was conducted to review the work of the church-related hospitals in Uganda, Rwanda, and Burundi in order to assess their work patterns and scope with regard to future planning and policy and the relationship of their activities to the Anglican Church. The author, a social scientist, visited each of the hospitals and government facilities at various levels. Other information was gathered from hospital and government records. Information covers economics, the pattern of disease, regional medical services, staff, training, facilities, health education, outreach health work, decision-making, cooperation, and policy. Suggestions on policy were solicited by sending each hospital a questionnaire; however, no definite policy could be ascertained from the responses. The appendices present statistics on finances, facilities, antenatal care, child welfare, and immunization. (RD)

- 1623 Krishna, S.R.** *Intensive care unit in a rural area*. Anaesthesia and Intensive Care (Sydney), 3(2), May 1975, 122-126. Engl.

The author describes the design and operation of a multipurpose intensive care unit (ICU) that served a rural population of 700 000 in Malaysia. The six-bed unit – a converted ward of the district's 450-bed general hospital – was intended to function for 3 years

only until a new, better-equipped hospital was completed. Consequently, the planners endeavoured to find more efficient ways of using the existing services (e.g., operating theatres, sterile supplies) and to introduce new facilities only at minimum cost and manpower. Design of the ICU, its administration, staffing requirements, and selection of equipment are discussed, and patient data (numbers, diagnosis, duration of stay, etc.) for a 2 1/2-year period are analyzed. The author believes that ICUs such as the one described use resources more efficiently than do specialized ICUs such as cardiac units, and he concludes that the capital and operating costs of general units are justifiable in terms of the lives they save and the confidence they produce among people using the health services. (MPM)

- 1624 McEvoy, P.J., McEvoy, H.F.** *Outside Europe: management of psychiatric problems in a Kenyan mission hospital.* British Medical Journal (London), 1(6023), 12 Jun 1976, 1454-1456. Engl. 9 refs.

A mission hospital in Kenya adopted methods of crisis management for the mentally ill; over an 18-month period, the staff and the patients themselves noted improvement in 54% of 102 patients. On discharge, 15% showed no change, and 11% were referred elsewhere — 7% to a government hospital and 4% to a traditional healer. Twenty percent were lost to follow-up. Early obstacles to the treatment programme were cultural-linguistic differences and staff fear. The former problem was eliminated through the employment of an interpreter, the most effective interpreter being a student nurse or medical auxiliary. The latter problem was dispelled by including psychiatry in the nurse curriculum, by involving all grades of staff in in-service training, and by setting a consistent example of understanding and encouragement. A special psychiatric file, which protected confidentiality, was established and cross-referenced with the general medical records. Domestic work within the hospital provided some mode of social rehabilitation. (AC)

- 1625 Sai, S.T.** *Haven of hope.* Forward (Rangoon), 8(18), 1 May 1970, 12-15. Engl.

A 50-bed hospital for the disabled at Thamaing, Burma (just outside Rangoon), provides medical and rehabilitative care for more than 600 patients annually. It is equipped with a hydroelectric therapeutic unit, occupational therapy department, and a gymnasium. Patients who attend the hospital are classified into one of five categories: amputees able to use appliances without limitations; those able to use appliances effectively for certain tasks; those requiring some assistance; those requiring assistance for all activities; and those who totally depend on others for care. Where possible, patients are treated on an outpatient basis, and criteria for admission are based more on transportation and distance than on severity of disability. Although some amputees are not fitted with appliances, most of those who are receive thorough preparation (including fitting) and subsequent training. The costs of artificial

limbs are delineated, and the services performed by the hospital staff for a 10-year period are listed. (AC)

- 1626 Wapakwenda, S.** *My experience at the rural health centre.* Zambia Nurse (Kitwe), 6(2), Aug-Sep 1974, 5-7. Engl.

The author relates her experiences at a mission hospital in Zambia; although she had finished training only a few weeks before joining the mission, she became sister-in-charge automatically. Other staff members were two dressers (health auxiliaries) and two servants. The hospital comprised 14 inpatient beds, about 30 beds in other houses for patients from long distances, and an outpatient department. The nurse supervised weekly antenatal clinics and children's clinics, which she initiated by offering free milk. She also prepared simple mixtures, but the hospital obtained most of its pharmaceuticals from medical stores in Lusaka. Her other duties included laboratory investigations, correspondence, and budgeting. (AC)

- 1627 Wheeler, M.** *Travel notes: a Liberian medical experience.* Yale Journal of Biology and Medicine (New Haven, Conn.), 48(5), Nov 1975, 439-449. Engl.

The author discusses his 5-month internship at the Curran Lutheran Hospital in ZorZor, Liberia, in terms of learning how to adapt Western medicine to the needs of developing countries. He describes the hospital itself, the diseases likely to be encountered there, and the ways in which the staff must cope with different aspects of the local cultural environment — dialects, taboos, attitudes, and the influence of the substantial indigenous health care system with which the hospital coexists. To make its services more appropriate to the needs of the people, the hospital has implemented a public health outreach programme that consists of satellite health clinics, a mobile health team, and a health education campaign that makes use of local press and radio. Unfortunately, the need to reduce the emphasis on expensive, inpatient-oriented health services has only recently been recognized at the national level. Too much of Liberia's health budget has already been committed to supporting one or two over-sophisticated hospitals that serve only a tiny percentage of the population, leaving insufficient funds for the more relevant decentralized approach of the national health development plan. (RD)

III.2 Rural Outpatient Care

See also: 1408, 1460, 1463, 1465, 1478, 1488, 1501, 1534, 1585, 1608, 1619, 1621, 1625, 1664, 1670, 1677, 1750, 1801, 1814, 1973, 2001, 2074

- 1628 Abrams, H.K., Nichols, A.W.** *Introduction of a rural health care system into isolated southern Arizona communities.* In Kuroiwa, H., Nagata,

H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 59-63. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

The measures taken by the University of Arizona to bring health care to the ill-served portion of Arizona's rural population (25% of the whole) are summarized. The great diversity of ethnic and economic backgrounds found in this population necessitates a number of different approaches. These range from the establishment of a neighbourhood health centre to serve a poverty area comprising 25 000 Mexican-Americans in the city of Tucson to the development of an electronic communications system to link remote Indian villages with the Arizona Medical Center. Other efforts include: a training programme for nurse practitioners and community health medics; consultation to small communities to help them obtain necessary medical services; and an outreach programme, whereby residents in family practice, medical students, and paramedical workers are assigned to underserved areas. Students and residents are involved throughout the programme, in the hope that this will increase the likelihood of their settling in the area. (HC)

1629 Adejuyigbe, O. *Providing health care in rural areas of the Western State of Nigeria*. Nigerian Medical Journal (Lagos), 4(1), Jan 1974, 6-12. Engl.

A study of the utilization and organization of medical services in rural Nigeria between March 1970 and March 1971 indicated problems and pointed the way for future changes. Two areas were chosen as typical of rural and urban settlements; 1 out of every 10 patients attending each of the 15 health centres was interviewed for demographic, socioeconomic, and medical information, and these data were supplemented further by staff reports and institutional records referring to attendance and morbidity patterns. Results indicated that the health centres were unable to provide appropriate diagnoses and treatments for serious problems due to poorly trained staff and low budgets. Adults tended to travel the long distance to the nearest hospital to find a doctor. From tables charting the populations serviced, their ages, complaints, and utilization patterns of centres and hospitals, suggestions for future planning are made. First, well-equipped health centres should be placed within a 5-mile radius of every home. Their staffs of doctors and paraprofessionals attracted by financial incentives should be specialists in mother and child health care and should be involved in preventive medicine and public health programmes. Meanwhile, mobile health units from the regional hospital centre should provide regular service to outlying villages. The financial investment required for these improvements would have long-term beneficial results in the improved health of the population. (ES)

1630 Benjala, J.M. Malawi, Ministry of Health. *Activities of Likuni mobile clinic team*. MOYO (Zomba, Malawi), Feb 1976, 14-15. Engl.

The mobile clinic established in 1971 at Likuni Catholic Mission Hospital, Malawi, offers a variety of antenatal and pediatric services. The staff of two nurse-midwives, one student midwife, one student nurse, a homecraft worker, and three hospital aides visit each of the five clinic centres once a week, where they provide health talks, cooking demonstrations, physical examinations, immunizations, preventive and curative therapy, and prenatal checkups. One encouraging aspect of their work has been the success of the weekly malnutrition clinic, where intensive health education is given; this clinic is held separately from the monthly normal health clinic so that mothers are not inhibited by the presence of their friends with healthier babies. Although the mobile clinic team has been successful in its work, attendance has been lower than anticipated. More effort is required to motivate mothers to register and then to keep up regular attendance. (RD)

1631 Bildhaiya, G.S., Bose, C. *Study of working of well baby clinic at Elgin Hospital, Jabalpur*. Indian Pediatrics (Calcutta), 6(9), Sep 1969, 622-631. Engl.

This study of the working of the well baby clinic at the Elgin Hospital in Jabalpur, India, examines its usefulness as a centre for gathering statistical information on the growth and development of children in the area and analyzes its effectiveness in promoting better health care. Statistical data for the period 1 January to 31 December 1962 are recorded and analyzed; these include sex, weight, and height differentials; incidence of disease and immunization; and attendance of 445 babies who were brought to the clinic. These show that the use of the hospital and clinic was motivated by lack of space at home for safe delivery and infant care and that the common diseases were respiratory and gastrointestinal infections, rickets, and malnutrition. The low rate of immunization (33% of the babies) and attendance (only 10% of the mothers attended regularly) was attributed directly to the make-shift organization of the clinic, which was run once a week and staffed part-time by personnel involved in other duties. The authors feel that strengthening the staff and operating the clinic on a full-time basis would increase its usefulness in the community. Its importance as a tool for gathering statistical data is unquestioned. (ES)

1632 Bradley, P.A. *Tube-feeding as an under-five clinic procedure*. Tropical Doctor (London), 6(4), Oct 1976, 190. Engl.

In the absence of inpatient facilities, the nasogastric tube has been utilized in four Bangladesh under-fives' clinics to feed children suffering from severe malnutrition, dehydration, and/or a concurrent illness or defect inhibiting food intake. Clinic staff provide equipment and food supplements, insert the tube initially, and explain the procedure to parents, who then continue feedings at home after a brief training period. The position of the tube is checked daily, and it is removed as

soon as the child is willing and able to eat normally. The success rate of this method, typified by a case history, has made it a standard practice. (RD)

1633 Centre for Social and Economic Development, La Paz. Servicio popular de salud: SEPSA. (Popular health service centre: SEPSA). La Paz, Bolivia, Centre for Social and Economic Development, Jan 1970. 6p. Span.

Created in 1963, Bolivia's "Centro para el Desarrollo Social y Economico" (Social and Economic Development Centre) sponsors the promotion of popular organizations devoted to rural development. DESEC, as it is called, has created institutions specializing in such areas as farming, animal husbandry, handicrafts, health, and housing. One such service — the "Servicio Popular de Salud" (SEPSA) — was created in 1966 to provide health care and a stable infrastructure for its delivery to areas lacking it. In many places, the service began with a mobile health unit, but the dispersion of the population made this system so financially and technically impractical that the present trend is toward the establishment of permanent continuously supervised health posts. These posts are self-supporting, providing treatment on a membership or fee-for-service basis. In addition, they provide some preventive and educational programmes. The work of SEPSA, during the year 1970, in four different regions — two rural, one urban, and one mixed — is briefly discussed, with reference to the number of consultations and the number of prepaid members in each area during this period. (HC)

1634 Chagula, W.K., Tarimo, E. Meeting basic health needs in Tanzania. In Newell, K.W., ed., *Health by the People*, Geneva, WHO, 1975, 145-168. Engl. 16 refs.

See also entry 1477.

In keeping with the rural development component of the Arusha Declaration (1967), Tanzania's approach to health planning has concentrated on the rural sector. Progressively more money is being allotted to health manpower training, preventive services, and health centres and dispensaries, while less is being spent on urban-centred hospital care. By 1980, every individual should have access to a minimum level of care in his own village, plus referral service to a higher level of care a few kilometres away. Regrouping the population in larger *ujamaa* villages is one method being used to reduce the cost of providing health and other social amenities; extensive use of auxiliary personnel — village medical helpers, maternal and child health aides, health auxiliaries, rural medical aides, and medical assistants — is another. At present, 65% of the population receive primary care from auxiliary health workers. This article covers the organization and implementation of the Tanzanian health services; the philosophy behind its planning; the training and roles of its auxiliary cadres; health facilities; and trends in health spending, health manpower development, etc., as reflected in six tables. (HC)

1635 Chaudhuri, S.N. Community paediatrics — paediatric care for the millions. Indian Journal of Pediatrics (Calcutta), 42(10), 1975, 10-12. Engl. 14 refs.

This brief article outlines an attempt to overcome India's enormous childhood mortality and morbidity problems by the introduction of local under-fives' clinics. Malnutrition is responsible for the death of approximately 6 600 Indian children, aged 5 years or less, per day, and the prospects for survivors are bleak. However, equitable distribution of available resources to satisfy the health needs of rural and slum areas is unlikely to be realized, and so an alternative approach to delivering health care to preschool children in these areas is being evaluated. The under-fives' clinic described in this article is a simple structure staffed by a locally recruited and specially trained child health worker who looks after the health of perhaps 1 000 children. She monitors nutritional status, performs immunizations, treats minor ailments, and provides nutritional advice to mothers. Two of these clinics have been established in the Calcutta slums by the Community Paediatrics Project of Behala Hospital, and the author believes that they represent an efficient use of limited resources. (MPM)

1636 Cort, J.L. Rural health centres in African areas of Nyanza province, Kenya. Sanitarian (London), 68, Apr 1960, 328-335. Engl.

In 1949, health centres were introduced into the health system of Nyanza Province, Kenya. Their aim was to integrate curative and preventive medicine and to expand the basic network of hospitals and dispensaries that already existed. One chief health centre was established in each of the five districts of Nyanza Province, and its staff acted as the administrator for all health work in the district, i.e., issuing drugs and supplies, setting objectives and policies, organizing mass campaigns, etc. Smaller health centres were spread throughout the districts, and by 1960 each one served approximately 60 000 persons. The staff of the health centre were supervised by a hospital assistant-in-charge, who also oversaw activities of the health subcentres and mobile health teams within his jurisdiction. The design of the health centres changed over the years but basic requirements have been stability of structure; adequate working space; ample accommodation for waiting outpatients; proper lighting, ventilation, water supply, drainage, and sanitary facilities; lockable storage space; and efficient design. Many of the pre-1949 dispensaries were converted into health subcentres, and these were staffed by a dresser (auxiliary health worker) and support personnel. (AC)

1637 Everett, J. Obstetric emergencies: a manual for rural health workers. Nairobi, African Medical and Research Foundation, Rural Health Series 4, n.d. 29p. Engl.

See also entries 1898, 1906, 1918, and 1933.

Midwives, medical assistants, and rural medical aids in Africa are the target of this short manual in which diagnosis and management for more than 25 obstetric

emergencies are set forth and illustrated. Abnormal conditions are grouped under the stage of pregnancy in which they occur, their signs and symptoms, and their cause. Pictures denoting or forbidding certain treatments reappear throughout the manual, and a list of indications for immediate referral to hospital is set forth at the back of the manual, along with instructions for hospital admissions. (AC)

- 1638 Fortuine, R.** *Availability and use of medical services in an Alaskan Eskimo community.* Public Health Reports (Rockville, Md.), 84(10), Oct 1969, 845-856. Engl. 14 refs.

A 1966 report focusing on an Eskimo community of 535 people in southwestern Alaska (USA) explores the effects of a harsh climate, isolation, and poverty on the provision and utilization of health services. Health conditions in the area are among the worst in the country with high infant mortality and prevalence of infectious respiratory diseases, especially tuberculosis. The people's attitude toward preventive, as well as curative, medicine is positive, and they make the best uses of the three facilities available to them. Access to the hospital, which is 155 air miles away, depends on weather conditions, but hospitalization rates are high for all age-groups. Field clinics are held irregularly by visiting doctors and are well attended, as are the services of the village's community health worker. This worker, who has been chosen from the village and has received basic medical training, treats common illnesses and makes use of radio for a doctor's advice for more serious cases. Although this system is also subject to atmospheric conditions, it is the most common service used. Demographic and utilization tables are included. (ES)

- 1639 Gorwitz, K., Dennis, R.** *Lake County, Michigan: a profile of rural poverty, public health, and a plan that failed.* Public Health Reports (Rockville, Md.), 90(4), Jul-Aug 1975, 347-364. Engl.

The experience of a health centre in a small, racially divided community in the USA underlines the necessity for careful planning and evaluation in health care programmes. The health centre, which was federally funded in 1968, aimed to provide both health services and employment opportunities. Although the community's need for the centre was apparent, from the beginning administrative policies frustrated its success. Because lines of authority and internal supervision were nonexistent, medical personnel refused to work in the centre, and the practice of hiring black workers and paying them wages that were higher than the local scale alienated the community's residents who perceived the centre as solely for blacks. Furthermore, staff were not properly prepared to collect data for measuring the centre's effect on the health status of the community. Within 5 years, the project had run up excessive costs and was deemed a failure. In 1974, a reorganization, which was based on planned use of regional resources and administration, took place but has not yet been evaluated. Statistical data on demography, morbidity, and mortality are tabulated. (ES)

- 1640 Gutierrez, R.A.** *Atencion medico-sanitaria en el medio rural. (Medical care and public health in rural areas).* Salud Publica de Mexico (Mexico City), 10(4), Jul-Aug 1968, 425-428. Span.

The measures taken to bring medical care and public health facilities to the 50% of the Mexican population living in 144 000 rural localities are briefly described. From 1936, various cooperative medical services — based on bipartite financing — were created as a result of pressure exerted on the government by groups of organized peasants. In 1965, these services were integrated into the public health care system. Since then, the trend has been toward the establishment of primary health centres, which in 1968 numbered 1 200. Over the years, training for auxiliary medical workers has been improved, and immunization, disease control, sanitation, water supply, and community development programmes have been carried out. The Mexican government has cooperated with FAO in providing nutrition education and food supplements, and at the time of this article's publication, it was planning a social security system for rural inhabitants that would bring free medical services to a population of approximately 1 million. (HC)

- 1641 Handschin, R.** *Integrated preventive-curative services in Aramco.* In Industry and Tropical Health VI, Boston, Harvard School of Public Health, 1967, 25-30. Engl.

Sixth Conference of the Industrial Council for Tropical Health, Boston, Mass., 25-27 Oct 1966.

By 1965, the Arabian American Oil Company of Saudi Arabia had reduced its per capita medical care expenses by 9%, despite rising costs, due to a combined programme of preventive and curative services initiated in various stages since 1956. It had also reduced infant mortality by 66% and completely eradicated kwashiorkor. The programme, which was aimed at the 69 000 employees and dependents of Aramco, included many nonmedical preventive measures, such as the use of residual insecticides to control malaria. A major emphasis has been health education, which has led to voluntary participation by workers and their families in tuberculosis detection, vaccination, and environmental health programmes. A disease-reporting system has been developed, and research has been undertaken into prevalent health problems. Many of the research projects have been compiled into comprehensive manuals and implemented. One project culminated in day care clinics providing up to 8 hours per day of special instruction to mothers of sick children. (RD)

- 1642 Kershaw, J.D.** *Experiment in Africa: the rural health services of Kenya.* Medical Care (Philadelphia), 1, 1963, 52-55. Engl.

Kenya has inaugurated a unique and highly successful health centre system to combat the severe medical and health care delivery problems it shares with the rest of Africa. Of the 300 centres projected about half are already in operation. Each centre functions as a working base for a health team, which serves 20 000 to

30 000 outpatients, who are referred to hospitals for further treatment if necessary. Each team consists of a hospital assistant as leader, dressers or assistant nurses, a midwife or assistant midwife, an assistant health visitor, other health auxiliaries, drivers, and domestic staff. The team members spend 2 or 3 days a week visiting predetermined locations where they hold antenatal, child welfare, immunization, and health education clinics; inspect schools; examine water supplies, latrines, and food stocks; and meet with resident health workers and village authorities to encourage self-help activities. Attendance at these clinics is increasing in an encouraging fashion, and Kenyan health authorities hope soon to find workable solutions to the problems of treating nomadic tribesmen and educating a largely illiterate population. (RD)

- 1643 Konotey-Ahulu, F.I.** *Danfa project.* Ghana Medical Journal (Accra), 11(1), Mar 1972, 1-2. Engl.

Editorial. See also entries 407 and 413 (volume 1), 1054 (volume 2), and 1995.

In discussing two articles on the Danfa comprehensive rural community health project in Ghana, the author applauds the success of the programme in eliciting the participation of community leaders and praises the objectives of the programme, which have led to a blending of service to the community, teaching, epidemiological research, and training of medical and paramedical staff. The cooperation between the Ghana Medical School, the United States Agency for International Development, and the University of California at Los Angeles is also lauded and is attributed to "nine conditions" on which the agreement was based. (AC)

- 1644 Larsson, U., Larsson, Y.** *Child health in developing countries - the role of the expatriate doctor: experiences from Ethiopia.* Medical Journal of Australia (Sydney), 2(4), 5 Oct 1974, Suppl., 29-32. Engl.

The role of the expatriate doctor in the health service of a developing country is examined with reference to the work of Swedish pediatricians and MCH workers in Ethiopia; some conclusions regarding appropriate training for the former are drawn. Swedish-Ethiopian collaboration began with the opening of a small outpatient clinic for children; the clinic soon expanded into a 45-bed hospital and, with the realization that preventive medicine was crucial to the improvement of health, an MCH and a children's nutrition unit were added. The service now comprises four large centres (in Addis Ababa) staffed by nurses and supervised by a pediatrician and a gynaecologist. The inpatient facilities have grown and are used for teaching purposes as well. The author points out that it is likely that expatriates will be required to staff such services for "many years to come"; he recommends that the physician destined for service in a developing country undergo a minimum of 2-3 years clinical, postgraduate experience in a children's hospital and that his outlook be oriented toward the community rather than the individual. (MPM)

- 1645 Mitchell, M., Chikakuda, J.** *Progress report on the pilot health centre scheme.* Malawi Medical Bulletin (Blantyre), 3, 1969, 107-111. Engl.

In 1968, the Malawi Ministry of Health initiated a pilot project designed to bring more preventive services to the rural health centres and hospitals in the Namtambo area and to upgrade their standards of curative medicine. Training courses were held at the Namtambo centre to instruct auxiliary health workers in preventive medicine and their roles within the framework of the medical team. Antenatal and under-fives' clinics were established to provide health and nutrition education, curative treatment, and immunization, with the eventual goal of holding one clinic of each type within 5 miles of every mother at least once a month. Project staff have worked closely with experts from related areas such as nutrition and agriculture, and the scope of the pilot project has been extended to other regions of Malawi where its activities can be coordinated with already-existing programmes. (RD)

- 1646 Morley, D., ed(s).** *Christian Medical Commission, World Council of Churches, Geneva. Some steps through which hospitals may become more deeply involved in community health care.* Contact (Geneva), 20, Apr 1974, 1-22. Engl.

Church-related and small government hospitals in developing countries must seek greater involvement with the surrounding community. The two major ways in which the hospital can develop its community commitment are (1) to supervise a network of health centres, a high priority that will bring great benefits for comparatively little cost; and (2) to initiate and encourage "community health action," examples of which include the development of an "outpatient village" and operation of nutrition rehabilitation centres. Before starting such endeavours, however, the opinion leaders of the community should be identified and encouraged to become involved in the schemes from the beginning. The hospital should have at least a simple form of district health plan to coordinate these activities. It will be based on the community diagnosis, the resources that could become available, and the wishes of the people; this is illustrated by a detailed example of a community diagnosis of malnutrition and the assessment of its possible causes and their solution. Other aspects of community health care discussed are health records, the importance of home visiting, the training of auxiliaries, and recruitment of social groups (e.g., schools, church congregations) into health care activities. There is also a section on the ways in which the attitude of hospital staff can be modified to become more outward looking; this involves some group discussion. The appendix contains an example of a questionnaire on attitudes toward comprehensive community care that can provide the basis for discussion. (MPM)

- 1647 Narain, B.** *Health care in community development blocks.* Indian Journal of Public Health (Calcutta), 4(1), Jan 1960, 17-23. Engl.

Although primary health centres in India are intended to be centres for integrated health care, their staff, facilities, and infrastructures are not suited for this task. Their staff have not been oriented toward community care and often do not have an understanding of community development and rural health problems. Some training programmes have recognized the importance of orienting students toward community care; however, such training should be introduced into every state so that future staff are prepared to undertake preventive activities. In addition, the primary health centres themselves need to be better equipped with facilities for integrated care, such as X-ray and laboratory equipment. They should also actively liaise with district hospitals for referral purposes. The district health officers should supervise the centres' activities, analyze progress reports, and suggest remedies to problems that arise. For these services, the district health officer should have status and benefits on a par with the district medical officer. (AC)

1648 Pearson, C.A. *Wesley Guild Hospital, Ilesha. The Hurford Ward, Ilesha.* Nigerian Nurse (Lagos), 2(3), Jan 1970, 70-80. Engl.

The Wesley Guild Hospital, Ilesha, Nigeria has, since its inception in 1913, emphasized child welfare. In 1956, Dr. David Morley, a pediatric specialist, joined the staff in order to discover the major causes of death in children under 5 years and to work out the best and most economical solution to a 56% mortality. The result was the now well-known "under-fives' clinic." This primary clinical care, delivered by midwives with some pediatric training, was found adequate for the treatment of 90% of all ailments (the remaining 10% being referred to a doctor) and over a period of 10 years succeeded in reducing child mortality to 12%. The 160-bed general hospital now boasts, in addition to its under-fives' clinics, antenatal, immunization, fertility, family planning, and tuberculosis clinics, plus a special clinic for treatment of the milder forms of leprosy. This article is immediately followed by another by the same author: *The Hurford Ward, Ilesha*. The Hurford Ward, the first of its kind in Nigeria, was opened in 1969. Designed for premature and sick infants, it provides accommodation for the mother and allows her to participate in the care and cure of her child. (HC)

1649 Pearson, C.A. *Control of communicable disease: role of the private sector.* Journal of the Society of Health of Nigeria (Lagos), 5(2), 1970, 53-55. Engl.

Under-fives' mortality in the Nigerian village of Imesile has been reduced by 38% in the last 10 years, and surviving children have demonstrated an improved growth rate thanks to the services provided by the under-fives' clinic of the maternal and child health centre. The Gjaba family health nurse project (Lagos, Nigeria) has also confirmed the effectiveness of under-fives' clinics. These clinics are based on the principles that child care should extend to age 5; that a midwife can undertake primary clinical care; that immunizations and tuberculosis examinations should be given to children at

the optimum time; and that complete records should be kept on each child. To combat the rising costs of employing nurses and professional midwives, the author recommends that a new grade of auxiliary midwives or nursing orderlies be trained to undertake the responsibilities of under-fives' clinics in rural areas and stresses the importance of maintaining a good working relationship between the clinics and the base hospitals, which can supply drugs, vaccines, and acute care. In addition, the author strongly advocates that all available resources, both governmental and private, should be used to support this sort of health service. (RD)

1650 Price, J., Karim, I. *Evaluation of psychiatric after-care in a developing country (Fiji).* British Journal of Psychiatry (London), 129, Aug 1976, 155-157. Engl.

A study of schizophrenics in Fiji revealed that a daily dosage of 200 mg of chlorpromazine was adequate follow-up treatment for discharged patients, especially those who had been hospitalized more than once. Although schizophrenia appears to be more common among Indians in Fiji, Melanesian patients were the most likely to default from follow-up treatment because of the cost involved in attending outpatient clinics to collect their drugs and because mental illness is more easily tolerated by the extended than by the nuclear family. Statistical data collected in 1971 and 1972 (on Fiji's first 200 registered schizophrenics) are presented. (RD)

1651 Shattock, F.M. *Disease prevention and health promotion.* Journal of the Royal College of General Practitioners (Dartmouth, England), 21, 1971, 393-409. Engl.

The author's experience in many developing countries has impressed him with the importance of maternal child health services and has underlined the value of Zambia's investments in maternal child health centres and under-fives' clinics. The former have not yet progressed beyond the provision of some antenatal care for mothers, but plans are to increase staff and eventually include a midwife at each centre. The latter have proliferated widely in the past few years. Their services, which comprise immunization, nutrition assessment, health education, and treatment of common ailments, are directed only to children under 5. At present, all Zambia's clinics have been limited by inadequate and inconsistent utilization, but efforts are being devoted to improving the services and their use. Some problems are beyond the clinics' control; for instance, the inability to reach high immunization levels is due mostly to disadvantages of certain vaccines, such as storage requirements, costs, the number of necessary follow-up visits, etc. On the other hand, many problems in nutrition assessment have recently been solved by the introduction of the Morley Road-to-Health chart and the QUAC stick (Quaker arm circumference measuring stick). The former is a simple graph that makes maximum use of weight-for-age measurements, and the latter is a measuring stick that links height with arm circumference. (AC)

- 1652 Sieg, K.W.** *Rural health and the role of occupational therapy.* American Journal of Occupational Therapy (New York), 29(2), Feb 1975, 75-80. Engl. 31 refs.

In the treatment of physically disabled and psychiatric patients, the occupational therapist should teach activities that are relevant to patients and help them function properly in their environment. In rural areas, therefore, the therapist may need to make a cultural adjustment by exploring the activities used in the patient's everyday living and by analyzing the skills needed to perform them in terms of muscle strength, coordination, range of joint motion, attention, and cognitive skills — an analysis that has already been done with domestic activities. The therapist may seek advice from vocational counsellors to find new jobs for the physically handicapped or to design ways in which the disabled farmer may continue in his agricultural pursuits. Other activities for the therapist include teaching parents how to care for handicapped children, evaluating elementary students, instructing rural teachers on testing, helping set up enrichment programmes for isolated rural children, and introducing geriatric patients to new interests to compensate for their failing senses. The occupational therapist would be most effective as part of a mobile health unit. (RD)

- 1653 Smith, M., Locum, A.** Papua New Guinea, Department of Public Health. *Obstetrical and gynaecological problems in the highlands of New Guinea.* Konedobu, Papua New Guinea, Department of Public Health, Aug 1971. 17p. Engl. Unpublished document.

These guidelines prepared by a 6-year veteran of obstetric practice in the Papua New Guinea Highlands outline gynaecologic and obstetric problems among native women. Their aim is to provide incoming doctors with a clear understanding of the nature of local medical problems and how best to treat them in order to avoid trial-and-error diagnoses. Because of geographic and cultural distance, patients often do not present themselves for treatment until cases are serious enough to require surgical intervention. Required reading for anyone who undertakes practice in the region is *Obstetrics and gynaecology in the tropics (and other developing countries)* by Lawson and Stewart; it is often quoted to validate the findings and treatments recommended by the author. Notes by Dr. A. Locum further clarify and expand on the incidence, characteristics, and treatment of medical problems. An annual report of the obstetrics and gynaecology clinic at Goroka Hospital confirms the guidelines' breakdown of disease and obstetric problems. (ES)

- 1654 Thambiah, R.W.** WHO, Geneva. *Final report on rural health unit, Chiangmai, WHO Project: Thailand-13, Nov 1951-Dec 1956.* Geneva, WHO, 1957. 24p. WHO/SEA/RH/8. Engl.

A WHO project was undertaken during 1951-1956 to develop the health services in a rural province of northern Thailand. The only existing facilities were the "second-class" health centres, staffed by a sanitary inspector and midwife, and little or no organized health work was being carried out. With the emphasis on staffing problems, the report describes in some detail the obstacles that had to be overcome in order to provide effective health care. The project's initial objective — the introduction of a maternal and child health service — was achieved by making more efficient use of existing resources. The reorganization of services meant that the midwife was able to run the MCH clinic with just the assistance of a maid and voluntary workers. Described in this report are the scheduling of MCH activities, the community involvement (which culminated in the introduction of the villagers' own health centres), and the establishment of training programmes and a midwifery training school. The project broadened its scope after 2 years to embrace sanitation and water supplies, but less progress was made in this direction. (MPM)

- 1655 UNICEF, New York. WHO, Geneva.** *Guide list "Rani": a composite list of equipment and supplies for peripheral health facilities.* New York, UNICEF, Dec 1975. 90p. Engl.

This publication supercedes SUNO 7 (0895), Flora (0896), and Lena (0897). It is intended largely for use by UNICEF personnel and is not available for general public distribution.

This equipment list — an amalgamation and revision of seven earlier lists of equipment recommended by and available from UNICEF — was devised to reflect current primary health care in the majority of countries requiring UNICEF assistance. The aim of this publication is to serve community health workers who have various levels of training and varying access to referral services and who provide most of the primary care; past lists catered to specific facilities, serving as check-lists for health centres, clinics, midwife services, etc. The present one describes four types of peripheral health centres and three cadres of auxiliary. Recommended and optional items are set forth in categories, such as dressings, diagnostic equipment, etc., and each item is illustrated and its function described; the dosage, regimen, and purpose of each drug is also included. (HC)

- 1656 University of Lagos, Institute of Child Health, Lagos.** *Manual of procedures of the Gbaja Family Health Clinic: a pilot project in the use of nurses to operate a comprehensive maternal and child health/family planning clinic in Nigeria.* Lagos, University of Lagos, n.d. 87p. Engl.

The Gbaja Family Health Nurse Clinic, Nigeria, was begun in 1967 to extend ambulatory pediatric care and family planning services to the urban disadvantaged in Lagos. The clinic is staffed by trained nurses functioning under the supervision of a general practitioner. The approach is comprehensive — all children who come to the clinic are registered and their subsequent progress followed up to the age of 6. A standard screening procedure developed by the nurses is applied to each child

as soon as he enters the clinic; seriously ill patients are quickly identified and promptly treated. At registration, mothers are told to bring several household items — clean cup and spoon, plastic bags (for clean and dirty diapers), medicine bottles, etc. — on their next visit. These are used to teach the basics of sanitation and nutrition. The mother is allowed to keep the child's health record, which includes a weight chart. This encourages her to promote the child's growth progress through proper feeding. Other procedures that have contributed to clinic efficiency are outlined, and instructions on setting up a family planning clinic are included. Sample record and immunization cards, immunization schedule, work schedule, lists of medicines, and outlines of the family health nurse training programme are appended. (HC)

- 1657 Vargas Gonzalez, W.** *Programas de nutrición aplicada en zonas rurales de Costa Rica. (Applied nutrition programmes in rural areas of Costa Rica).* Assignment Children (Geneva), 35, Jul-Sep 1976, 81-91. Span.

Infant and child mortality declined significantly in the rural areas of Costa Rica served by the health posts and education and nutrition centres established as part of the Ministry of Health's rural health programme. At present, 66% of the population is covered by 150 health posts, with a projected goal of 230 health posts and 100% coverage by 1977. Each health post is located in a work area of some 150 km² containing approximately 16 villages composed of 600 families or 3 000 inhabitants. One easily accessible village is chosen as the site of the health post, which is staffed by a nursing auxiliary, normally a woman, with a year's training, and a rural health assistant, generally male, who has been trained for 4 months. The nursing auxiliary concentrates on caring for persons in the area close to the health post, whereas the assistant spends most of his time in outlying villages; between them they visit each family in their area once every 6-8 weeks. The principal objectives of the health posts are the control or eradication of infectious diseases, maternal child health, first aid, environmental sanitation, and health education. Each health post will eventually be associated with a nearby education and nutrition centre for children aged 2-6. Each centre will handle from 40-100 children with a staff of cooks, an elementary teacher, and local volunteers. A nutrition auxiliary with 3 months training will supervise each group of 10 centres. These education and nutrition centres are designed to provide the children with a nutritious breakfast and lunch, to offer pre-school educational opportunities, to involve the whole community in nutrition-related activities, to distribute government food supplements, and to monitor child development. (RD)

- 1658 Werner, D.** *Project Piaxtla: working towards a campesino-run health care network in the mountainous reaches of Sinaloa and Durango, Mexico.* Palo Alto, Ca., The Hesperian Foundation, 1975. 8p. Engl.
Unpublished document.

The Piaxtla project in Mexico is a community health care scheme based on a network of "outposts" run by auxiliary health workers and supported by a referral system. The project provides low-cost health care for 10 000 *campesinos* who are spread over 5 000 km² of mountainous terrain and contributes to the development and evaluation of training methods and resource materials for similar community-based health services. It is run with the long-term view to self-sufficiency. Emphasis is placed on teaching, and most of the project's cash outlay is for health-related activities aimed at community development. Villagers may pay for treatment in work instead of money, and this practice has been beneficial from both an economic and an educational point of view; for example, by working in the clinic garden, the villager learns about the cultivation of nutritious foods. Over the past 10 years the project has noticeably raised the area's health level; however, it has been hampered by economic, social, political, and legal problems, most of which are beyond its control: land tenure inequity, exploitation of poor by rich, harmful traditional customs and attitudes (e.g., dietary taboos), harmful modern attitudes (e.g., misplaced faith in medicines, bottle-feeding, etc.), and corruption at all government levels, etc. And, inevitably, there is a "...paradox in trying to help others help themselves." Future plans, which are summarized, are geared toward greater self-sufficiency. (HC)

- 1659 Zurayk, H.C., Harfouche, J.K.** *Family health and population profile in a peri-urban setting.* Lebanese Medical Journal (Beirut), 23(3), 1970, 287-304. Engl. 24 refs.

The family health centre of Mreyjeh (Lebanon) is an experimental pilot project in community health care, which was established in April 1969. Its primary objective is to create a practice area (based on the family unit) in a peri-urban setting, for service, teaching and research, in order to supplement and reinforce the principles of total health care emphasized in classroom teaching, and to improve methods of health care delivery in Lebanon and neighbouring countries. A census operation, yielding the distribution of 1 264 families and 7 147 individuals of the Mreyjeh area, with respect to pertinent socioeconomic variables, was the first step in project implementation. (Journal abstract.)

- 1660 Vogel, L.C., Dissevelt, A.G.** *Application of workstudy techniques on a rural outpatient clinic, aiming at simpler and standardized medical and administrative procedures.* In Whither Rural Medicine? Tokyo, Japanese Association of Rural Medicine, 1970, 196-199. Engl.

Fourth International Congress of Rural Medicine, Usuda, Japan, 30 Sep-4 Oct 1969.

Investigators who examined, recorded, and analyzed the procedures of a rural outpatient clinic in Kenya recommended changes in the medical assistant's duties and in the practices of injection room and pharmacy staff. During 1 week, the administrative and operational tasks undertaken for 3 500 outpatients were recorded. Analysis indicated that all patients were seen

by a medical assistant and that his performance decided the quality of medical care, the patients' waiting time, and the workload of all other staff. Recommendations to simplify his tasks included selecting students and training them for speed and efficiency; limiting diagnostic time to 1 1/2 minutes per patient and shifting clerical duties to a clerk; standardizing therapy regimens for drugs, dosages, and duration; and using a code for recording diagnosis and treatment. Recommendations for injection rooms and pharmacies were to use a more powerful drug once rather than a weak drug many times, where the result would be equal, and to prepack tablets for standard drugs and dosages. (AC)

III.3 Mobile Units and Services

See also: 1642, 1652, 1655, 1879, 1966, 2011

- 1661 Barker, V.L.** *Rural mobile health unit.* American Journal of Nursing (New York), 76(2), Feb 1976, 274-275. Engl.

A mobile health unit staffed by nurses serves an area of 75 000 square miles with a scattered population of 45 458 in a rural area of New York State, USA. The unit visits seven sites in the county monthly, and visits are publicized in advance by radio, newspaper, clubs, churches, schools, etc. Services are free to the public and include health education classes and health assessment examinations. The unit is particularly active in the areas of identification, referral, and follow-up. A survey of clinic attenders revealed that the average length of time since they had seen a doctor was 10 years; the clinic, therefore, seems to be meeting the residents' need for an entry into the health care system. Future plans include the addition of more health education classes — for diabetics, on child growth and development, and on economical nutrition — and evaluation of the unit's activities. (HC)

- 1662 Booth, A.M.** *Rural public health in South India.* Journal of the Christian Medical Association of India (Mysore), 45, Jul 1970, 396-400. Engl.

A team comprising two Indian nurses and a British nursing missionary from a hospital in Dharapuram, South India, has established its own mobile health unit to combat local problems in nutrition and environmental hygiene. The members of the team visit four nearby villages weekly and see each family within the target villages once a month. They keep medical records, advise on nutrition and immunization, give simple hygiene demonstrations, and provide public health education, using audiovisual aids. Expectant mothers receive ante- and postnatal care and family planning counseling, and may request a nurse to attend home deliveries. Although many of the participating nurses are discouraged when health practices are not immediately

adopted, the author is convinced of the value of their efforts. (RD)

- 1663 Ebrahim, G.J.** *Child care in the tropics.* Nairobi, East African Literature Bureau, 1971. 112p. Engl.

See also entry 589 (volume 1).

From conception to birth and even through adolescence, a child depends on his parents for proper nutrition and care; some help in meeting this responsibility is available for "enlightened parents" through this manual on child care in the tropics. Teachers in family life education, etc. may also find it useful. Although the language is somewhat sophisticated, the information is comprehensive, comprising discussions on pregnancy, the newborn, infant nutrition, physical and emotional growth and development in childhood, training and discipline, and health and diseases in children. Illustrations accompany many of the principles. (AC)

- 1664 Fangtao People's Commune Health Center, Fukien.** *Shoulder-pole clinics.* Chinese Medical Journal (Peking), 2(4), Jul 1976, 247-252. Engl.

The Fangtao People's Commune Health Center (People's Republic of China) has 18 medical workers and 50 beds to serve a population of 28 000 peasants distributed in 18 production brigades. Thanks to the training provided by the centre, by 1976 each brigade had two to four barefoot doctors, and each village within the catchment area had a midwife and a health worker. The centre has organized its own personnel into two "shoulder-pole" clinics of three to five people who continuously visit each brigade and isolated outpost. Each shoulder-pole clinic carries drugs, a small X-ray machine, a microscope, and other medical equipment up to 40 kg weight. In addition, all medical staff have been encouraged to extend their professional skills as far as possible so that shoulder-pole clinics can now deal with almost any type of emergency operation or epidemic. The centre has also stressed training in traditional medicine and acupuncture as opposed to more costly Western medicine. (RD)

- 1665 Klima, J.E., Shelton, S.W., Baldwin, J.E.** *Prototype design for a mobile dental clinic.* Military Medicine (Washington, D.C.), 140(5), 1975, 350-353. Engl.

The U.S. Navy constructed a mobile dental unit with adequate facilities and space for simultaneous treatment of two dental patients. This unit was later field-tested under various environmental conditions, and some alterations were made in the equipment and design. The result was a prototype, whose facilities are located in an insulated van constructed of light-weight metal with a reinforced frame. The temperature within is controlled by a combination air-conditioner-heat pump. The electrical supply system can be operated by a diesel or gas turbine generator that provides at least 15 kilowatts, 60 Hertz, single phase electrical power (direct current). A single horsepower compressor provides the compressed air for the dental facilities, and a water system stores 35 gallons of hot and cold water.

The dental chairs, made of tubular aluminum, collapse into compact units for transport and are operated by a manual hydraulic lift. The dental instruments include a built-in, high-velocity oral evacuation system, dry heat/autoclave sterilizer, high-speed air turbine, and low-speed hand pieces with air and water coolant. A floor plan and several pictures within the article illustrate the entire unit. (AC)

- 1666 Magian, V. de C., Anderson, G., McKenzie, E., Person, J.B.** *Mobile hearing program in central rural Manitoba.* Canadian Medical Association Journal (Ottawa), 115(7), 9 Oct 1976, 642-644. Engl.

A mobile hearing programme, which was initiated in rural Manitoba (Canada) in December 1973, utilized volunteers from the local community and screened 4 146 schoolchildren, of whom 158 had hearing abnormalities. The programme was aimed at children aged 4-9 but included some older children who were referred by teachers. Screening procedures were undertaken by community volunteers who received a days training in the basic physical properties of sound, elementary anatomic and physiologic aspects of hearing, screening techniques, and audiologic equipment. They worked in pairs and screened the children using methods recommended by the American Speech and Hearing Association. Children who failed to hear sounds were re-screened within a week. These procedures identified 276 children who had possible impairment, and this group was further screened by an audiologist who referred 158 to an otolaryngologist for treatment. One recommendation arising from the programme is that it be expanded to include a larger population. (AC)

- 1667 Medical World News, New York.** *Medicine aground and afloat in Brazil: priest-MD's clinic and hospital boat bring care to villages.* Medical World News (New York), 17(5), 8 Mar 1976, 93-94. Engl.

A mobile hospital boat that travels the Amazon has brought regular medical and surgical care to previously inaccessible Brazilians and has dramatically reduced mortality. The number of the boat's staff fluctuates but at least includes several paramedics and either a surgeon or a nurse. The staff performs simple dental procedures, immunizations, and provides health education. When the surgeon is on board, he undertakes to correct cleft palate, club foot, etc. (AC)

- 1668 Safavi, H.** *New measures for expansion of medical coverage in rural areas.* In Whither Rural Medicine? Tokyo, Japanese Association of Rural Medicine, 1970, 217-218. Engl.
Fourth International Congress of Rural Medicine, Usuda, Japan, 30 Sep-4 Oct 1969.

The Iranian health corps, begun in 1963, consists of medical conscripts — physicians, dentists, and auxiliaries — who, after 4 months of training in the barracks, serve the remaining 16 months of military service in the villages. There, divided into contingents, each with a mobile unit at its disposal, they give medical treatment,

help improve health and sanitation standards, and assist in rural development projects. Each doctor sees an average of 70 patients per day, and medicine is distributed free of charge; surgical procedures are performed on the spot or referred to the nearest hospital. During a 2-year period, 5.5 million people were treated, 20 000 were hospitalized, and 33 000 were referred; health and sanitation films and lectures were attended by some 1 897 000 villagers; 782 sources of water were purified; 168 villages had water pipes laid; and 234 village clinics or dispensaries were built, as a result of the efforts of the health corps. The government hopes that excorpsmen will decide to settle in the villages and plans to provide a monetary incentive in future. Two related measures are briefly mentioned: the formation of the Women's Welfare Volunteer Corps, made up of nurses, social workers, etc., to complement the health corps; and the instigation of a 2-month rural internship for all medical students. (HC)

- 1669 Vickers, A.** *Royal flying doctor service of Australia.* World Medical Journal (New York), 10, May 1963, 171-172. Engl.

In 1912, a Presbyterian minister, John Flynn, suggested that aircraft and radio be used to bring medical care to the sparsely populated areas of Australia, but it was not until May 1928 that the first flight was made from a flying doctor base. Thus began the Royal Flying Doctor Service of Australia, which is now a public service supported by contributions from users and the state and national governments. The present service comprises many well-equipped hospital bases, which serve surrounding areas up to 400 miles through the use of small radio "transceivers." Medical advice is available at all times and suffices for most of the calls; however, emergency flights are sometimes required for seriously ill patients. Routine monthly clinics are also a part of the service and these provide prenatal care, immunizations, and care for the chronically ill. Although the patients are not charged a fee, most contribute something to the programme. (AC)

- 1670 Waddy, B.B.** *Organization and work of the Gold Coast medical field units.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 50, 1956, 313-336. Engl. 16 refs.

The organization and activities of the medical field units in the Gold Coast (Ghana), during the period 1951-1955, are reported. Their objectives, staff training, and progress in combating specific diseases are described in some detail. Most teams were staffed by auxiliaries and special emphasis was placed on maintaining their morale by developing initiative and demanding responsibility from them at all stages of their career. In the future, the author believes that priority in tackling rural endemic disease should be given to conditions that affect farming efficiency and, consequently, nutrition; the most important of these diseases are yaws, guinea worm, and onchocerciasis. A programme for their control should involve, first, a field survey and mass treatment or other control measure and then, continuous

outpatient treatment and surveillance in strategically placed static dispensaries. (MPM)

- 1671 Yusof, K.** *Maternal mortality amongst the rural Malays.* Medical Journal of Malaysia (Singapore), 28(3), Mar 1974, 149-153. Engl.

In Malaysia, maternal mortality, which is one index of a population's general health, is still excessive. Reasons for death include poor nutrition, housing conditions, and economic conditions. Health services are scarce and are poorly utilized in areas where they exist. These facts indicate not only that services must be improved but that they must be accompanied by an active campaign to promote them. Suggested improvements to health services are that obstetric clinics be established and be visited regularly by obstetrics students; that these clinics be expanded later to include inpatient beds and an operating theatre; and that the flying squad — an obstetrician, an assistant, and an anaesthetist — be utilized more fully than it is at present. (AC)

III.4 Community Health Education

See also: 1401, 1488, 1497, 1569, 1579, 1582, 1587, 1604, 1610, 1619, 1644, 1646, 1657, 1773, 1807, 1809, 1862, 1891, 1894, 1933, 2001, 2075

- 1672 Airiyan, A.P.** USSR, Ministry of Health. *Sani-tarnoe prosveshchenie na Armashskom sel'skom vrachebnom uchastka.* (Health education in the Armash rural medical sector). Moscow, Ministry of Health, Central Research Institute of Health Education, 1964. 38p. Russ.

When a local environment and the living and working conditions of its inhabitants have been statistically analyzed, objectives for a health education programme in that geographical sector can be identified and approached; programmes to meet the objectives should rely on many visual aids that are readily obtainable, such as models, photos, displays, etc. This approach to health education is undertaken in Russia's rural sector of Armash. Sanitary culture and child care schools share much of the responsibility for it, and the hygienic culture museum provides hygiene instruction for rural inhabitants and health personnel. (AC)

- 1673 Barrow, R.N.** Christian Medical Commission, World Council of Churches, Geneva. *Breast feeding: a myth or a must?* Contact (Geneva), 35, Oct 1976, 2-5. Engl.

Educational efforts in developing countries should be directed toward encouraging breast-feeding, because its recent decline has been responsible for much malnutrition and diarrhea in children. Campaigns should be aimed toward personnel responsible for delivery and postnatal care, toward mothers, and toward the community. Professional personnel should be reminded of breast-feeding's physiological benefits for the mother

and the child and should be urged to give support, reassurance, and comfort to new mothers. They should also be encouraged not to separate the newborn from its mother and not to recommend a strict feeding schedule. Mothers should be given instruction on the nutritional superiority of their milk and should be taught how and when to supplement breast-feeding with solid foods. Finally, members of the community should be recruited to provide support to new mothers and should be given continuing education on the importance of breast-feeding. (AC)

- 1674 Elliott, K., Knight, J., ed(s).** *Human rights in health. Ciba Foundation symposium 23 (new series).* Amsterdam, Associated Scientific Publishers, 1974. 304p. Engl. Refs.

The potential impact of basic health measures on the quality of life of the world's poor and deprived is examined in this series of papers presented at the Ciba Foundation symposium in 1973. The symposium recognizes four determinants of health as universal human rights: safe water to drink, sufficient food, protection against communicable disease, and access to the means of controlling fertility. Each paper examines a particular topic and is followed by a general group discussion. Topics treated in this manner include: financial resources for the implementation of public health measures; water supplies in developing countries, their sources and characteristics; technological improvement in the quality and availability of water supplies; the consequences (both positive and negative) of improved water supplies; the need and potential for increased food production in developing countries; food production and population growth; food supplies for physiologically vulnerable groups; a brief report on health services and medical education in the People's Republic of China; problems and prospects regarding the control of communicable disease; the basic human right to the means of controlling fertility; human rights to personal health care; and some bottlenecks in implementation, as encountered by the Scandinavians in their aid programme. (HC)

- 1675 Fanamanu, J., Vaipulu, T.** *Working through the community leaders: an experience in Tonga.* International Journal of Health Education (Geneva), 9(3), 1966, 130-137. Engl.

Comparison of two health education programmes in Tonga demonstrates the value of involving both women and men in programmes of self-help. Although both programmes aimed to rally community participation in sanitation, eradication of flies and mosquitoes, and introduction of pour-flush latrines, one project appealed only to male leaders whereas the other not only petitioned women to participate but placed the management in their hands. Within a year, the former programme had been abandoned; however, the latter programme continued to operate successfully. The women proposed motivational elements that were adopted by the whole village and that contributed much to the success of the programme. These included

stipulations that families who completed their pour-flush unit within 8 weeks could obtain village funds for a connection to the main water supply; that a family who completed housing repairs within 12 weeks could draft others to help them haul away refuse; and that families who still kept pigs and horses within the village after 6 weeks would be responsible for cleaning unoccupied areas in the village. The sanitation programmes and their evaluation are detailed. (AC)

1676 Hall, B.L. *Mtu ni afya! Tanzania's mass health education campaign.* Convergence (London), 7(1), 1974, 71-78. Engl.

In 1973, the Tanzanian Ministry of Health organized a mass health education campaign called "Mtu ni afya" (Man is Health), which reached nearly 2 million adults. Groups of 10-15 people formed "radio study groups," and more than 70 000 study group leaders were recruited and trained between December 1972 and April 1973. Study groups listened to radio broadcasts on various health problems, in particular preventive medicine, and met to discuss the relevance of these topics to their own lives. Although it was difficult to find a control group of adults, results indicated a 20% increase in health knowledge demonstrated by the study group participants, many of whom were from the *ujamaa* villages, a primary target. In addition, household health practices improved by 15%, and attendance at rural dispensaries increased. A Swedish International Development Authority grant covered the cost of the campaign, including follow-up literature but not the radios or batteries. (RD)

1677 Kanaaneh, H.A., Rabi, S.A., Badarneh, S.M. *Eradication of a large scabies outbreak using community-wide health education.* American Journal of Public Health (New York), 66(6), Jun 1976, 564-567. Engl. 9 refs.

The successful eradication of scabies in a rural, Arabic village in West Galilee provides a model for disease control campaigns. In September 1974, a health team of seven, who were able to communicate with the villagers on emotional, cultural, and linguistic levels, designed a plan to aid a local health unit, which had been unable to check the spread of scabies. The plan was divided into four stages: data collection, public education, formation of a village committee, and disease treatment. The purpose of data collection was to determine the extent of infection and the people's attitudes toward treatment so that a suitable public campaign could be devised. The data indicated that 22% of the population were infected and that the campaign should be directed at all ages. Thus the campaign took the form of pamphlets, school lectures, and formal and informal meetings, with the village elders forming a committee to aid the health team's efforts. Treatment then began. Entire families visited a special clinic for examination; infected persons were instructed in the use of medication, and their homes and belongings disinfected. They were also asked to return for three follow-up inspections. The following year, only one case of scabies was reported. (ES)

1678 Keyser, J.M. *Upgrading rural health standards: a Turkish case.* Social Science and Medicine (Oxford), 8(7), Jul 1974, 421-423. Engl.

In Turkey, where military service is compulsory, a programme to teach soldiers hygiene and sanitation was expected to effect positive changes in rural health when they returned to their homes. A study of five rural villages in 1965, however, indicated that the health impact of returned servicemen was negligible. The failure of this programme was in its basic tenet that rural peoples are extremely isolated and ignorant of health practices; rural villagers are aware of the benefits of modern medicine and resort to doctors and apothecaries whenever possible. But in areas where doctors are few and where environmental factors (such as lack of water) make health practices extremely difficult, rural populations have little choice. Thus, to upgrade health standards in rural villages, more is needed than just rudimentary training in hygiene. Formal training is needed so that persons can provide a wide range of health and sanitation services. (ES)

1679 Klefstad-Sillonville, F., Cusset, J.N. *Experience d'éducation sanitaire chez les Bamileke du Cameroun. (Experiment in health education among the Bamileke of Cameroon).* Médecine Tropicale (Marseille), 29(3), May-Jun 1969, 382-393. Fren. 13 refs.

A methodology for a health education programme is developed and its application in a rural village of illiterate mountain-dwellers in Cameroon is described and evaluated. The methodology comprises the following steps: accurate diagnosis of the problem, establishment of priorities, discovery of an appropriate means of persuasion, training and utilization of appropriate intermediaries, and frequent evaluation of method effectiveness. Two principles are considered of cardinal importance: that problems be attacked one at a time but from all angles at once; and that education be carried out in the local language and explanations be made within the local system of logic and local points of reference. The choice of teaching aids in the education programme devised for the above mentioned group — the Bamileke — admirably illustrates the application of the principles and is described in some detail. (HC)

1680 Kreysler, J. *Uhuru na maji. (Health, water supply and self reliance in Mayo village).* Journal of Tropical Pediatrics (London), 16, Sep 1970, 116-123. Engl. 10 refs.

Since 1966, a group of Tanzanian experts, expatriate advisers, and leaders in Mayo village, Tanzania, have planned and launched a number of community development programmes. In keeping with recent government policy, the overall decision-making and financial responsibility for these projects has rested with the villagers. The experts have acted as advisers; they conducted a survey of health problems to identify priorities and offered agricultural, financial, and administrative guidance. The survey indicated that the greatest needs were to provide preventive and curative

services to under-fives and schoolchildren; and to promote health education. To meet these needs, villagers proposed and set up a school nutrition programme, an under-fives' clinic, and a water supply project; they constructed the facilities and paid for some of the operational costs. External agencies provided staff, medicines, etc., at the villagers' request, and health education was built into the process of "learning by doing." Although evaluation of the project has proved difficult, the author feels that the most positive indication of its success is the evolution of a group of leaders who are "development conscious," knowing that improvement of the life of their village can be achieved only if common efforts are made in a spirit of cooperation and self-reliance. (HC)

- 1681** Laoye, J.A. Nigeria, Ministry of Health. *Place of health education in family health*. Your Health (Lagos), 9(27), 1976, 20, 22-24, 27. Engl.

The Chief Health Educator in the Nigerian Ministry of Health describes the new approach to health education. A carefully designed health education programme is regarded as an essential element in the national health plan because it can reach and influence every member of the community. Its increasing importance in Nigeria is indicated by the expansion of the network of health education units to promote the concept of family health. These units encourage community participation in the practical application of health projects by, for example, enlisting the support and facilities of community groups with the ultimate objective of creating "health conscious families." The role of the nurse and other health personnel in health education activities is also outlined, both within and outside the hospital or health centre. (MPM)

- 1682** Liming Commune Health Center, Heilungkiang. *Giving full play to the role of the commune health center*. Chinese Medical Journal (Peking), 2(4), Jul 1976, 253-256. Engl.

The Liming Commune Health Center, People's Republic of China, has embarked on several successful programmes based on the directives of Chairman Mao; in 1974, for instance, a spring cleanup campaign resulted in the collection of 7 600 cartloads of garbage and human and animal excreta for composting. In that same year, 95% of persons eligible received inoculations to protect them against smallpox, poliomyelitis, and measles, and a programme was launched to improve environmental health conditions. The last was based on a model; health centre personnel met with one of the production brigades from the surrounding area, and together they drew up a plan for improved sanitation. Within 3 months the measures had been implemented. To popularize the experience, many health workers met in the commune and then began similar campaigns elsewhere. (AC)

- 1683** Martin, A.R. *Preventive aspects of rural medicine*. East Pakistan Medical Journal (Dacca), 12, Oct 1968, 132-136. Engl.

Preventive medicine is essential to a health care programme, and the key to successful preventive medicine is systematic reporting and surveillance. Reporting and surveillance permits an assessment of the disease problems; thus priorities can be set and resources allotted to combat the problems. It also makes possible the evaluation of programmes for disease control, etc. For example, surveillance figures of 100 000 inhabitants in a rural area of East Pakistan indicate that cholera and smallpox have been successfully controlled, but other preventable diseases, such as tetanus, tuberculosis, septicæmia, and measles, still contribute significantly to mortality. Also, birthrate is high (4%) and aggravates overcrowding and nutritional diseases. Such figures suggest that emphasis of present preventive measures must be expanded to include a major campaign for birth control as well as disease control and environmental health. (AC)

- 1684** Mora Ramirez, J., Lopez Orozco, O. *Participacion comunitaria y saneamiento basico rural en Colombia*. (Community participation and rural environmental sanitation in Colombia). Assignment Children (Geneva), 34, Apr-Jun 1976, 89-101. Span.

A study of rural communities carried out by the Colombian National Institute of Health revealed that in 1974, of 7 100 villages ranging from 50 to 2 500 inhabitants, 4 125, or 58%, had no potable water supply and 6 440, or 91%, had no sewage disposal system. As a result, each community has been encouraged to participate in a national programme for creating, constructing, and maintaining its own water and sewage system. The village provides approximately 20% of the necessary funds, and the remaining 80% are in part financed by a long-term loan. In 1974, the monthly payments from rural communities came to U.S.\$1 258 600. The implementation of this national programme should in the long run provide employment opportunities and increase the value of the land. Other anticipated benefits include more community participation in development and health education and a decrease in the rural exodus. (RD)

- 1685** Mulekya, M.M. *Lutte contre le kwashiorkor au Zaïre: la campagne soja dans le Kivu*. (Control measures against kwashiorkor in Zaïre: the Kivu soya bean campaign). Assignment Children (Geneva), 35, Jul-Sep 1976, 41-52. Fren.

The Kivu soya bean campaign in eastern Zaïre, which aims at educating the public to supplement its low protein diet, has succeeded in lowering mortality due to malnutrition. It promotes the use of the soybean, because it is highly nutritious, can grow in the area, is available to even the poorest family, and is easy to preserve. The campaign has been waged by nutritional centres who publicize in journals, radios, and posters; they stress soybean's cheapness, goodness, and compatibility with the traditional diet. Early in the campaign, an agricultural institute selected the soybean variety most viable in terms of quantity and quality, and then simple recipes using soybean flour were published in a

book written in both French and the local language. One of the nutritional centres in the campaign supplies agricultural machinery, land, and grist mills; while another provides soybean biscuits. Each centre sponsors educational programmes for mothers and offers lessons on the preparation of soybean flour meals, child development, sanitation, nutrition, and hygiene. Mothers receive a package of soybean flour and are encouraged to cultivate soybean along with traditional foods, such as corn and sorghum. The increasing demand for soybean flour and the slowly diminishing incidence of malnutrition attest to the success of the programme. (ES)

- 1686 Phillips, M.A.** *Health education in leprosy.* Makerere Medical Journal (Kampala), 21, Jun 1976, 15-16. Engl.

The occupational therapist at Kumi Leprosy Centre, Uganda, explains the importance of teaching patients and the general public about leprosy. Patients are more likely to take proper care of their bodies, if they know that the disease can be cured and that deformities can be prevented. As for the general public, health education should clearly delineate that segregation of patients is unnecessary, that leprosy can be cured, and that most people have a natural immunity to the disease. It is important that people in positions of influence (e.g., schoolteachers and community development workers) are properly informed about leprosy so that they in turn can help eliminate the persistent fear that surrounds this disease. (MPM)

- 1687 Purina, E.A.** USSR, Ministry of Health. *Za chistotu usad'by. (Maintaining cleanliness on the household grounds).* Moscow, Ministry of Health, Central Research Institute of Health Education, 1963. 6p. Russ.

This brochure on the importance of handling excreta carefully explains that waste products taken from outdoor latrines may be infested with the eggs of parasites and that measures must be taken to destroy the parasites before the products are used for fertilizer. One way suggested to destroy harmful parasites is to compost waste; this is accomplished by mixing waste products with manure or refuse and letting this sit and decompose for 6 or 7 months. The heat generated by decomposition destroys the parasites. (AC)

- 1688 Ray, S.C.** *Planning for people's participation in community health development programmes.* Your Health (Calcutta), 19, Dec 1970, 376-379. Engl.

This article presents health planning in India as an integral part of community development and suggests that basic health programmes such as control of infectious disease and family planning would benefit from a multidirectional approach, i.e., a combined effort to motivate the population on the part of the local authorities, teachers, medical practitioners, and opinion leaders. The author proposes the establishment of a health subcommittee in each village or ward to promote health education among the general population and in the schools. In addition, the subcommittee would be useful

in identifying the most common health problems in the community; enumerating all individuals, groups, agencies, and organizations considered potential sources of help; and setting priorities and devising strategies for multidirectional problem-solving within a suitable time frame. The subcommittee's expenditure would be minimal, since material for executing a programme is available from the departments of health and family planning; its function would be, rather, to prepare a favourable atmosphere in the community toward the acceptance of government services. The author estimates that successful implementation of basic health programmes would result in a 66% reduction in the present sickness rate and be felt economically in the form of increased productivity due to reduced absenteeism resulting from sickness. (HC)

- 1689 Robson, J.R., Carpenter, G.A., Latham, M.C., Wise, R., Lewis, P.G.** *African child health: district team approach to malnutrition, Maposeni nutrition scheme.* Journal of Tropical Paediatrics and Environmental Child Health (Kampala), 8, 1962, 60-75. Engl.

The medical, veterinarian, and agricultural officers in Songea District, Tanganyika (Tanzania) jointly designed a scheme to combat malnutrition in a population that exhibited an exceptionally high prevalence of deficiencies in vitamin A, riboflavin, and protein. They undertook surveys and discovered that agronomic methods were poor and that often cassava was the only food staple consumed by the people. A campaign to explain the relationship between diet deficiencies and illness was only minimally successful; however, it was continued along with a programme to promote the cultivation of maize and the introduction of fish ponds in the area. Twelve months after the scheme was implemented, a follow-up medical survey indicated some improvement in the nutritional status of the population, but improved health services were thought to be partially responsible for the improvement. The agricultural methods that were espoused in the scheme included rotation of crops (tobacco, groundnuts, pigeon peas, cassava, beans, and maize) and scientific spacing of plants. After 2 years, the crop yield had doubled. (AC)

- 1690 Scotney, N.** *What makes health education succeed or fail?* AFYA (Nairobi), Jan-Feb 1976, 3-7. Engl.

"Health education aims . . . to secure beneficial . . . changes in people's behaviour." It must be based on a knowledge of people — their customs, habits, and beliefs — and it must be planned. There are countless examples of health programmes that failed because health education was not successfully integrated; the programme planners and implementers did not make allowances for some basic premises of health education: people are different and need to be approached differently; health education must reflect current health services and problems; efforts to change behaviour must be monitored and evaluated; and the whole health team must cooperate in health education. (AC)

- 1691** Spain, Ministry of Labour. *Botiquín: de urgencia en el medio agrícola; socorrismo en el campo: como atender al accidentado; rata: un gran enemigo; anquilostomiasis: normas fundamentales de seguridad; hidatidosis: riesgo y normas preventivas.* (Preventive medicine: first aid on the farm; the rat, a great enemy; anchylostomiasis; hydatidosis). Madrid, Ministry of Work, 1963-1969. 2v.(unpaged). Span.

Two of these five illustrated pamphlets – “First aid on the farm” and “First aid to accident victims in the country” – are aimed at impressing upon the Spanish-speaking worker the need to have a first-aid kit and a basic knowledge of accident management when working in surroundings where medical care is not readily available. The first describes the uses of the various items to be found in the first-aid kit; the second explains how to apply artificial respiration, cardiac massage, and tourniquet; how to move the victim; and how to treat a foreign object in the eye, burns, etc. The remaining three pamphlets – “The rat: a great enemy,” “Anchylostomiasis” (hookworm), and “Hydatidosis” (tapeworm) – instruct the reader in the health hazards presented by these three agents and how to avoid contamination by them. The National Institute of Medicine and Work Safety has not indicated whether these five pamphlets are part of a series or isolated publications; it may be possible to obtain others. (HC)

- 1692** Stott, H.H. *Valley Trust: a socio-medical experiment.* South African Medical Journal (Cape Town), 42, 26 Oct 1968, 1115-1118. Engl. 9 refs.

The Valley Trust, a registered welfare organization, was established in the 1950s to control malnutrition on a vast Zulu Reserve in South Africa. The trust, whose planners believed a wide sociomedical approach to the problem was required, eventually incorporated a health centre, a maize-grinding mill, a food preparation unit, a demonstration garden, an interest-free finance company, a home produce market, an agricultural advisory service, and a fish-raising pond. The initial element of the programme, the health centre, offered curative, preventive, and educative services; later, through community support, five subcentres were opened in outlying areas. To expand the concepts taught in the health centre's nutrition classes, a food preparation unit was also opened. In it were demonstrated methods for preparing foods that required only the simplest traditional utensils and that only minimally damaged basic nutrients. This unit helped in promoting acceptance of fish ponds, and these in turn not only provided a protein supplement but a source of clean domestic water. The overall acceptance of the programme has been encouraging: many natives have begun raising and selling vegetables, consuming whole-grain maize (maize-grinding mill), constructing and utilizing the fish ponds, etc. (AC)

- 1693** V.T. Krishnamachari Institute of Rural Development, Samiala, India. *Training rural workers as change agents: a seminar report.* Baroda, India, M.S. University of Baroda, 1967. 62p. Engl.

On the premise that “the real challenge in the developing countries today is to smoothen the change process through developmental education,” this seminar attempts to provide trainers and supervisors of “change agents” with an opportunity to compare notes and analyze their approach and methods of work. Trainers and supervisors who attended the seminar comprised doctors, health educators, university professors, social workers, agricultural experts, etc. Several papers, each followed by a report on the ensuing discussion, are presented. Their topics include the trainer's responsibility in nurturing the student's awareness of his role as an agent of change; the effectiveness of rural workers as agents of change; rural school teachers as change agents; the role of the social worker in the context of social change; making training effective; the role of ethos (belief, convictions) in changing people, with examples from the Samiala Institute of Rural Development, India; and discontinuity between attitude and behaviour, and its implications for the training of rural change agents. The final chapter constitutes an evaluation of the seminar itself as a training tool. (HC)

- 1694** van Etten, G.M., Anten, J.G. *Evaluation of health education in a Tanzanian leprosy scheme.* International Journal of Leprosy (Washington, D.C.), 40(4), 1972, 402-409. Engl.

A study was made of a 5-year leprosy educational scheme in Tanzania involving different population groups, i.e., village leaders, school children, and the general public. It was concluded that health education activities, if carried out incidentally or irregularly, are of little benefit and may be negated by tribal attitudes. Even in the most successful areas where conditions are relatively favourable, it is necessary to pay more attention to traditional institutions and structures and to tailor the educational efforts more closely to these patterns. The school leprosy education activities have proved valuable, although an incidental reverse effect was noted in some children who, taught that leprosy was contagious, concluded that they should avoid all affected persons. The greatest educational impact on the general public has been achieved by the programme's curative activities and therefore priority should be given to this aspect before investing in supplementary health education activities. (Modified author abstract.)

- 1695** WHO, Geneva. *Development of health education services.* WHO Chronicle (Geneva), 30(1), Jan 1976, 35-37. Engl.

The inclusion of health education units among other health services in the WHO African Region is a fairly recent development. Since the establishment of the first health education unit in Liberia in 1944, some 30 African countries have followed suit, most since 1960. Although the form and content of health education programmes vary widely, their basic functions normally include administrative activities, training of personnel, encouragement of group activities on a local level, and research. Health education has been extensively used in campaigns against communicable diseases and in the

areas of nutrition (Zaire) and sanitation and waste disposal (Nigeria). Health education is taught in many schools, but the radio is the principal means of disseminating health education information, with secondary use of other forms of mass media; the most outstand-

ing example of an all-out health education effort was Tanzania's 1973 campaign. Existing health workers must be intensively trained in the efficient utilization of health education methods in order to ensure the future of health education in Africa. (RD)



A village health volunteer in Thailand trains health workers in a regional hospital.

IV. Primary Health Manpower – Training and Utilization

IV.1 Primary Medical Care

IV.1.1 Professional

See also: 1411, 1415, 1427, 1433, 1451, 1465, 1467, 1472, 1480, 1524, 1600, 1628, 1741, 1770, 1782, 1783, 1804, 1930, 1947

- 1696 Bennett, J.F., Saxton, G.A., Lutwama, J.S., Namboze, J.M.** *Role of a rural health center in the teaching program of a medical school in East Africa.* *Journal of Medical Education* (Chicago), 40, Jul 1965, 690-699. Engl.

Makerere Medical School of the University of East Africa, Uganda, has established a rural health centre as an instrument for teaching preventive medicine and public health practice. Located at Kasangati, 9 miles north of Kampala, the centre is permanently staffed by a team of one physician and various paramedic and auxiliary health workers. Trained to understand the local community, the team carries out a comprehensive, family-community programme including the whole spectrum of promotive, preventive, and curative services. In four nearby villages, community development projects are under way, while weekly clinics at the dispensary serve people from distant areas. Centre facilities include an eight-bed maternity unit, an auditorium, records room, consulting rooms, laboratory and education workshop, plus housing facilities for staff and students. The teaching curriculum, as it is applied to the health centre situation today, is outlined in detail. Future developments in the teaching programme will probably include an orientation toward epidemiology and community diagnosis during the first 4 years, and a period of public health practice in the fifth. (HC)

- 1697 Bewes, P.C.** *Management of wounds.* *Tropical Doctor* (London), 6(3), Jul 1976, 108-111. Engl.
- In a discussion of wound management in the tropics, a doctor explains why it is preferable to delay closing a wound. Despite careful washing (social toilet) and cutting away of damaged tissue (surgical toilet), some contaminating bacteria inevitably remain in the wound. Normally they will be surrounded and "starved out" by the body's inflammatory response. But this response

may be impaired as a result of stitching, which strangulates some tissues, clogging up the body's supply lines, and damages others, turning them into food for bacteria. He recommends, rather, sterile gauze packs and light bandaging in the case of wounds and skeletal traction (as opposed to plaster-of-Paris encasement) in the case of fractures. A policy of delayed closure "ruthlessly applied" in his ward for 18 months has resulted in complication-free recovery of all wound patients. In addition, using this method, junior staff can undertake treatment of serious wounds, and fewer antibiotics are needed. Seven case histories are cited to support this policy. (HC)

- 1698 Bosch, S.J.** *Experiment to change medical education and medical care in Argentina (a personal essay).* *Social Science and Medicine* (Oxford), 7 May 1973, 373-386. Engl.

In 1959, an innovative medical programme was launched in Argentina, which gradually evolved into a demonstration project encompassing three distinct but interrelated programmes: (a) a graduate programme for advanced training in internal medicine, (b) an undergraduate programme in community medicine and behavioural sciences, and (c) a programme designed to organize and test the feasibility of a prepaid group practice health plan based on a teaching hospital. Although differing in scope and immediate objectives, the three programmes shared the single purpose of furthering the advancement of medicine and promoting a needed change in the patterns of delivery of care and medical education. For those who planned and developed this programme, the goal was to create a coherent organization, integrating mutually interacting elements. By this standard, the threefold experiment must be reckoned a failure. Yet, some changes were achieved which in Argentina were considered important. Some of the factors involved, of course, were essentially local, prescribed by the political, economical, and social circumstances prevailing in Argentina at the time. On the other hand, the experience and fate of the programme may contain a more universal meaning. In spite of its failure to achieve the stated major goals, a limited demonstration of the feasibility of change in Argentina's current approach to health care and medical education was achieved. (Modified author abstract.)

- 1699 Butler, W.** *Undergraduate education of physicians in Cuba.* *Journal of Medical Education* (Chicago), 48, Sep 1973, 846-858. Engl. 13 refs.

The evolution, goals, administration, and content of physician education in Cuba are examined in some detail and compared and contrasted with physician education in the United States. Although such principles as fusion of theory and practice, coordination of basic medical science with clinical science, teaching of broad principles rather than facts, etc. are common to both curricula, the following are more highly developed in the Cuban: adaptation of health education to health needs and health care; priority of preventive medicine over curative medicine; acceptance of the concept of the health team, in which the doctor is only one element; and recognition of the authority of a national ministry of health in planning and evaluation. Throughout the study, the author stresses that changes in the Cuban curriculum have taken place within the context of ongoing social revolution. This accounts for "certain intangibles of motivation and morale" that the American or European reader might find difficult to comprehend and that account for, e.g., the nonelitist self-image of the Cuban physician, who sees himself as serving where he is needed, an equal among equals. The Integrated Study Plan, the Work-Study Programme, the faculty-student relationship, the curriculum (with tabulated samples), and the role of examinations are covered in the ensuing discussion. The author departs "favourably impressed with the honesty, flexibility, and effectiveness of current Cuban programmes." (HC)

- 1700 Candau, M.G.** *Les effectifs sanitaires dans les pays en voie de développement. (Health manpower in developing countries).* Canadian Journal of Public Health (Toronto), 58, Aug 1967, 351-354. Fren.
Canadian Public Health Association Meeting, Ottawa, 25-27 Apr 1967.

In an address to the Canadian Public Health Association, the author, a WHO representative, recommends that priority be given to the educational systems of African nations and to the establishment of national medical schools and training centres for other health workers. Failure to emphasize health manpower training will thwart the UN goal of one doctor per 10 000 inhabitants by 1977. At present, there are 20 African countries with a ratio of less than one doctor for 20 000 inhabitants, and the situation is rapidly worsening because of the emigration of medical personnel and the increase in population. Within Africa, the quality of education declines as the level rises, and medical school costs discourage many students, especially those who must travel outside their country to study. The nurse shortage is also desperate due to the traditional attitude that a woman's education is an unnecessary luxury. The problems resulting from shortages are compounded by the maldistribution of personnel; graduate physicians are reluctant to serve in rural health centres because of the physical and intellectual isolation, inadequate transportation and communication systems, badly equipped and constructed facilities, and lack of opportunities for further education and specialization. Thus, the role of auxiliary health workers assumes a much

greater importance. Canada, which has already contributed greatly to WHO and its work in developing countries, is urged to turn its attention to these problems. (RD)

- 1701 Candau, M.G.** *Some observations on the problems of medical education in Africa.* Journal of Medical Education (Chicago), 41, May 1966, 446-450. Engl.

In 1966, only six well-established, fully functioning medical schools were training doctors in Africa, and the population was increasing at a much higher rate than were the numbers of physicians. The need for auxiliary personnel who could take on much of the physician's workload was apparent, but the level of training for them had not been agreed. There was controversy over whether or not auxiliaries should be provided with training that could be upgraded in future to that of qualified physicians. Although this process is politically acceptable in socialist countries, in others it is less so. A WHO experiment undertaken from 1960-1967, however, suggested that it was possible at least. Medical assistants in the newly independent Zaire were sent to France and "trained up" as doctors. The course lasted 3 years and proved satisfactory. (AC)

- 1702 Cheng, T.O., Axelrod, L., Leaf, A.** *Medical education and practice in People's Republic of China.* Annals of Internal Medicine (Philadelphia), 83(5), Nov 1975, 716-724. Engl. 19 refs.

Through radical adaptation to current health needs, the Chinese medical curriculum has been shortened from 6 to 3 years. Esoteric and irrelevant subjects have been omitted; disease and its cure have been approached holistically, rather than piecemeal; and the "four principles of integration," i.e., integration between theory and practice, Western and traditional medicine, prevention and treatment, and classroom lecturing and practical application, are judiciously applied. The curriculum and schedule of one medical college are outlined to show how this is done. Although general directions and guidelines are set by Peking, local curriculum variations exist between schools and are encouraged. Highly specialized physicians are trained but are encouraged to spend a considerable proportion of their time in general practice; medical research exists but is purely goal-oriented, geared to the prevention and treatment of prevalent diseases. Total medical manpower now numbers 5 million (serving a population of 800 million). Other categories of health worker — barefoot doctor and "middle" doctor — are briefly mentioned along with the fact that well-qualified nurses with 5 years practice may graduate as doctors after 1 year of schooling. (HC)

- 1703 Diesh, P., Bhattacharjee, B.N., Seth, R.K., Pae, A.M.** WHO, New Delhi. *Report on a seminar on the training of medical officers in rural areas of India.* New Delhi, WHO, Apr 1973. 63p. WHO/SEA/PHA/106. Engl.

Individual articles have been abstracted separately under entries 1021, 1065, 1066, 1070, 1076, 1098, 1117, 1175, 1284, and 1287 (volume 2).

Representatives from national, state, and local branches of India's health system met to exchange ideas and to formulate two rural-oriented curricula — one for trainers of basic health workers and one for physician educators. General discussion focused on the problems of auxiliary health personnel; it was agreed that their functions were poorly defined and coordinated and, as a result, poorly prepared for and supervised. It was recommended that a committee be established to standardize and codify auxiliary functions; that an intercountry seminar on rural health care delivery be planned; that traditional practitioners be upgraded; and that the curricula formulated at the meeting be adapted to local conditions and implemented. The suggested curricula are annexed, and the timetables proposed. (AC)

- 1704 Dimond, E.G.** *Medical school curriculum in the People's Republic of China: progress report after 4 1/2 years of experience.* Journal of the American Medical Association (Chicago), 236(13), 27 Sep 1976, 1489-1491. Engl.

In the People's Republic of China individual medical schools have considerable flexibility within the basic political guidelines, which stipulate time limit (3 years), student selection methods and criteria, and graduate placements. The schools, thus, have fashioned their curriculum to fit their resources and have succeeded in combining political, practical, physical, and vocational education. At the Shanghai Second Medical School, for instance, the curriculum includes 884 hours of political studies and 186 hours of physical education with the faculty. Practical course work comprises 4 weeks in the military, 2 weeks in a factory, and 6 weeks at hard farm labour. The vocational studies, which demand the most time, include 198 hours of foreign language; 72 hours of medical physics, chemistry, and mathematics; 288 hours of public health with field experience; 100 hours of basic diseases; 176 hours of normal human structure and function; 433 hours of new medicine and pharmaceuticals (traditional medicine); 52 hours of basic diagnosis, 528 hours of surgery; 186 hours of obstetrics and gynaecology; 186 hours of pediatrics; 120 hours of ear, nose, and throat studies; and 60 hours of dermatology. These subjects are all liberally sprinkled with practice in the field, which begins in the first year of study. (AC)

- 1705 Diop, B.** *Formation de l'enseignant en medecine (specialment en Afrique): experience Dakaroise. (Training the medical educator in Africa: the Dakar experiment).* Medecine d'Afrique Noire (Paris), 22(12), 1975, 777-784. Fren.

A course has been designed to enable Senegalese health educators to upgrade their teaching skills. The 3-week course comprising 40-45 hours has for its specific objectives to develop the participants' skills in defining educational objectives in terms of behaviour; to enable

them to plan a programme and choose the most appropriate teaching method for its implementation; and to help them devise examinations and other means of student evaluation. The various responsibilities that will be expected of the future doctor are set forth and discussed in some detail. Suggestions regarding teaching aids and materials are outlined. (HC)

- 1706 Dogramaci, I.** *Experiment in medical education in Turkey.* In Hyde, H. van Z., ed., *Manpower for the World's Health*, Evanston, Ill., Association of American Colleges, Sep 1966, 180-185. Engl.
See also entry 1711.

In 1961, a new concept in medical education was introduced in Turkey with the establishment of two new medical schools, one in Ankara, the other in Erzurum. The concept is geared to the rural practitioner who is working in a developing country — without access to sophisticated consultation or referral services. It coordinates teaching of three main departments: basic medical sciences, clinical sciences, and community medicine. Subject matter is presented in an integrated manner and discussed by instructors from various departments so that the student gets a well-rounded view. Students in their 3rd and 4th years rotate, in small groups, to clinical departments and rural health centres; 5th-year students serve a rotating internship in medicine, pediatrics, surgery, and obstetrics and gynaecology. Each student is assigned a family from a low socioeconomic background at the beginning of his medical training and, under close supervision, is responsible for its medical care until graduation. This new system also encourages the student to pursue independent research and to make use of the library. In this way, it is hoped to produce a physician who will be a "thinker and a community-minded scientist." (HC)

- 1707 Ebrahim, G.J.** *Delivery of health care to children in the developing countries.* Clinical Pediatrics (Philadelphia), 13(9), Sep 1974, 777-782. Engl. 10 refs.

Physicians in developing countries must be trained to direct rural health systems effectively. At present, graduates tend to concentrate in urban areas, and those who enter rural practice have not been prepared for their role. This is one reason that rural health centres manned largely by auxiliaries under the supervision of a physician have not been completely successful. Another reason is that the rural population still has more confidence in traditional medicine and only consults the centre for curative care. The author cites three examples of medical auxiliaries who can be trained to substitute for the physician: the medical assistant of Africa, the assistant nurse-midwife of India, and the indigenous midwife, who is universal, and evaluates their work. He notes that even parents can be used to spread information about nutrition and recommends the under-fives' clinic as the most economical method of utilizing scarce medical resources and personnel. (RD)

- 1708 Fendall, N.R.** *Training district medical officers.* Lancet (London), 2, 27 Aug 1966, 491-492. Engl. Letter to the editor.

The term "rural medicine" applies to a specific art that should be taught to physicians who are bound for practice in rural areas of developing countries. Their needs are special, and their training should emphasize diagnostic skills but should include instruction in making the greatest impact with inadequate funds, personnel, and facilities in the face of overwhelming demand. (AC)

- 1709 Frankenberg, R.** University of Zambia, Lusaka. *Man, society and health: towards the definition of the role of sociology in the development of Zambian medicine.* Manchester, England, African Social Research 8, Dec 1969, 573-587. Engl. Refs.

Sociology has been introduced into the medical curricula in many developing countries; the justification for its introduction is the subject of this article. Sociology is the study of society, social institutions, and social relationships. Its functions, as applied to medicine, are (1) categorizing disease by social statistics (death, birth, income, lifestyle); (2) understanding the roles of the sick person and healer; and (3) understanding the roles of different persons within the health services hierarchy. All three of these functions are important to a holistic approach to health in any society, but in the developing countries, where the dichotomies of rural and urban dwellers are so immense, they are essential. (AC)

- 1710 Harrison, T.S.** *University medicine in the Near East, 1971: a three-year perspective.* Surgery (St. Louis), 72(5), Nov 1972, 681-691. Engl.

The American University of Beirut and medical schools in the Middle East in general face the following problems: shortage of native academic leadership; lack of national facilities for full specialization (now considered "an inescapable requirement of modern medical care"); inadequacy of incentives to encourage foreign-trained specialists to return to the region; lack of support for medical research in an area that presents "unique research potential"; and an educational attitude not oriented toward critical scientific thinking. Politics, minority interests, and American immigration policies are cited as factors aggravating these problems. It is suggested that Middle Eastern governments provide specialty scholarships in return for rural service; instigate programmes to provide employment in rural areas for foreign-trained specialists; and give greater support and encouragement to national medical research. Complementary action on the part of the USA would include a reversal of immigration policies and support of specialist training in the Middle East. (HC)

- 1711 Hyde, H. van Z., ed(s).** *Manpower for the world's health.* Evanston, Ill., Association of American Medical Colleges, Sep 1966. 344p. Engl. Refs.

Institute on International Medical Education,

Washington, D.C., 27-30 Mar 1966.
See also entry 1706.

International cooperation in the field of medical education is the theme of the report on the 1966 Institute on International Medical Education. Much discussion is devoted to the health needs of developing countries and how medical institutions in developed countries can best contribute to meeting these needs. The material is grouped under five headings: development, world health, and the role of the United States; a world programme for health manpower; the medical, economic, and social factors that bear on medical education in the developing countries; patterns and effectiveness of past and present programmes of international cooperation in medical education; and the future role of the Association of American Medical Colleges and its member schools in international cooperation. The following points are emphasized in the concluding remarks: the doctor is a member of a team and no longer the lone purveyor of health care; the focus of medicine is the community rather than the individual; national planning is crucial to raising universal health standards; and appropriateness is the test of excellence in health care systems for developing countries. (HC)

- 1712 Jelliffe, D.B.** *Education for child health workers in developing regions.* Postgraduate Medical Journal (London), 38(436), Feb 1962, 105-111. Engl. 20 refs.

In Uganda, as in other developing countries, disease takes its greatest toll during infancy and childhood; therefore, doctors and nurses with specialized knowledge in pediatrics are urgently needed in the health services to teach, supervise, and advise. They require a type of training in which knowledge and experience, gained both locally and abroad, are blended; such a combination would enable them to operate under local conditions but be aware of recent developments and long-range plans. A curriculum, designed to produce the most appropriate physicians in the shortest length of time, would include 1 year acting as pediatric registrars in their homeland; 1 year studying in a pediatric centre overseas; 9 months taking a course leading to a recognized public health diploma; 3 months visiting tropical medicine institutes; and 6-12 months readjusting in the centres where their training began. (HC)

- 1713 Joseph, S.C.** *Health manpower or rural primary care. Problems and potentials in relating medical education to rural needs, as illustrated by recent new attempts in Wyoming and Central Africa.* Public Health Reports (Rockville, Md.), 91(2), Mar-Apr 1976, 159-163. Engl. 15 refs.

One method for preparing health professionals to practice in rural areas is to move the educational setting from the urban hospital to the rural community. In 1972-1973, this method was considered in two vastly different areas of the world — the State of Wyoming (USA) and Cameroon (Central Africa). In Wyoming, a proposal was submitted to introduce a medical education programme into the state's sole 4-year university,

and in Cameroon, a proposal was drawn up to make the current medical education programme more relevant. The two proposals had in common the concept of students' serving apprenticeships within a rural community's established health services. They both attempted to foster "health team" education, and both shared the common opposition of traditional medical education. Although Wyoming has yet to adopt its proposal, the university centre for health sciences in Yaounde has initiated a community-based programme. Thus far, the major problems have been brought about by inadequate supervision, lack of interest, and the traditional health hierarchy; the programme's impact has yet to be evaluated. (AC)

- 1714 Joseph, S.C.** University of Wyoming, Laramie. *Medical education for community health care: supplementary report*. Laramie, Wyo., University of Wyoming, Jun 1974. 56p. Engl.
See also entry 1715.

For more than 20 years, the state of Wyoming (USA) has participated in an agreement entitled "Western Interstate Commission for Higher Education" (WICHE). The purpose of the arrangement is to assist young people in gaining entrance to educational programmes not available inside the state. In return for a "preference" given to Wyoming students, the state pays a subsidy of \$5 000 per student per year. From 1954 to 1972 the state supported 144 medical students in this programme. Of the 132 who eventually received MDs, only 21 entered practice in Wyoming, and of those, two entered rural practice. The return of MDs after 1969 has been nil; the state's need for physicians has increased substantially — especially in rural practice. Alternatives to the problem seem to be either an increased investment in WICHE or a new system of medical education. The figures from the present WICHE programme indicate the first alternative is not likely to effect the result desired. If the second alternative were only the introduction of traditional medical education, the cost would be prohibitive. This is not the case. A viable alternative is the coordination and use of health facilities throughout the state so that students may be introduced to practice in Wyoming. Through such a plan, medical students could gain an education suited to the needs of rural health care, and the state could afford to develop quality curricula. (AC)

- 1715 Joseph, S.C.** University of Wyoming, Laramie. *Medical education for community health care: a plan for Wyoming*. Laramie, Wyo., University of Wyoming, Jan 1974. 125p. Engl. Refs.
See also entry 1714.

This proposal, which was presented in 1974 to the state legislature in Wyoming (USA), outlines an innovative programme for medical education. It goes beyond acute care hospitals and urges that clinical training for medical students be provided in facilities that characterize practice in Wyoming — widely scattered rural health facilities. The plan strongly recommends that medical education in Wyoming stress family practice, the health team approach to care, and new methods of

communication and instruction. The last include problem-oriented and computerized health histories, programmed learning, and self-teaching. By using the facilities located in communities throughout the state, the proposed programme fosters rural practice and involves practicing health professionals in continuing education. Affiliation with a faculty of medicine outside Wyoming is advocated for additional training, and the establishment of a medical education resources centre is counseled. This centre would continually evaluate both the medical curriculum and the teaching methods. The initial investment suggested is \$400 000. (AC)

- 1716 Lancet, London.** *Congo experiment*. Lancet (London), 2, 5 Dec 1970, 1173-1174. Engl.

To alleviate the extreme shortage of doctors in the Democratic Republic of the Congo (Zaire), 60 of the country's 136 medical assistants were retrained as physicians in 1960. They attended French universities and were exempted from the baccalaureate and the first 3 years of the medical school curriculum. They all completed the final 3 years and, with remedial help, passed the regulation qualifying examinations. Now in the service of their country, the 1963 graduates have proven, almost without exception, to be competent medical practitioners. (RD)

- 1717 Mackay, D.M.** *Problem of medical officer recruitment in agricultural industry*. Journal of Tropical Medicine and Hygiene (London), 79(5), May 1976, 102-105. Engl.
Sixth International Congress of Rural Medicine, Cambridge, England, 21-27 Sep 1975.

Common to all developing countries is the problem of doctor recruitment for rural areas and agricultural industries. The young doctor, who is faced with the prospect of poor cultural amenities and scarcity of social and professional contacts, prefers to practice in the city. The resulting maldistribution has been solved in some countries by forcing graduates to repay their medical education by a term of rural practice, but this approach leads to frustration and unwillingness to provide more than basic care. The solution to the problem is the creation of a career structure among agricultural industries, complete with high salaries and career opportunities. This would provide doctors with the ability to send their children to school, to enjoy city vacations, to visit colleagues, and to foresee a satisfactory future in rural practice. (ES)

- 1718 Mahadevan, B.** *Drawbacks of our current medical education system*. Journal of the Indian Medical Association (Calcutta), 59(5), Sep 1972, 209-214. Engl.

Indian medical education is criticized, and some recommendations are put forward for its improvement. Defects in the present system are summarized as follows: poor student selection; cumbersome, nonutilitarian syllabus; outdated teaching methods; ill-trained, inexperienced teachers; outdated examination system; and inappropriate curriculum, i.e., one not geared to national

and community needs. A detailed discussion of possible changes culminates in six major recommendations: that medical schools adapt their content and methods to the changing health needs of the people; that they increase their output of physicians; that they admit increased numbers of students from economic backgrounds and ethnic groups now inadequately represented; that they individualize education to fit students' varying rates of achievement, educational backgrounds, and differing career goals; that curricula be developed by interdepartmental groups including participation by the students; and that medical schools assume responsibility for education and research in the organization and delivery of health services. Finally, the author points out the desirability of establishing autonomous medical colleges with curricula flexible enough to permit experimentation in medical education. (HC)

- 1719 Mallick, S.A.** Pakistan Family Planning Council, Islamabad. *Review of family planning education in medical institutions in Pakistan*. In Mallick, S.A., Rehman, S., Zaidi, V., eds., *Proceedings of the WHO Seminar on Teaching of Family Planning in Medical Colleges, Nursing and L.H.V. Schools*, Islamabad, Pakistan Family Planning Council, 1971, 23-40. Engl.
WHO Seminar on Teaching of Family Planning in Medical Colleges, Nursing and L.H.V. Schools, Dacca, 4-8 Oct 1971; Karachi, 11-14 Oct 1971.

See entry 1720 for complete proceedings.

Because rapid population growth counteracts economic and social progress in a country, the Government of Pakistan has recently adopted a positive family planning policy and has urged medical schools to devote several hours of physician curricula to the study of family planning. This action was urged by a survey that examined the teaching of family planning in the medical schools. The survey had revealed that the subject rated little time in the curricula, that little in-service training was available to students, and that textbooks lacked information on either the demographic and socioeconomic aspects of population growth or the clinical and public health aspects of family planning. A survey of medical graduates had indicated that attitudes toward family planning were favourable but that fewer than half the graduates had knowledge of family planning and 84% had never inserted an IUD. Recommendations to medical schools were to emphasize the human reproductive physiology, neuro-endocrinology, reproductive biochemistry, nutritional aspects of pregnancy, and pharmacology of contraceptives and drugs used in the treatment of sterility and to include, within obstetrics and gynaecology, complications of repeated pregnancies, illnesses in which pregnancy is contraindicated, and methods of birth control, including abortion. (AC)

- 1720 Mallick, S.A., Rehman, S., Zaidi, V., ed(s).** Pakistan Family Planning Council, Islamabad. *Proceedings of the WHO seminar on teaching of family planning in medical colleges, nursing and*

L.H.V. schools. Islamabad, Pakistan Family Planning Council, 1971. 276p. Engl.

WHO Seminar on Teaching of Family Planning in Medical Colleges, Nursing and L.H.V. Schools, Dacca, 4-8 Oct 1971; Karachi, 11-14 Oct 1971.

See also entry 1719.

Two week-long seminars were held in Pakistan; they aimed to review the teaching of family planning in medical, nursing, and paramedical institutions and to recommend curricula, teaching methods, and teaching aids suitable to family planning education. The seminars had a common format — sessions covering the present status of family planning education in Pakistan, the efforts elsewhere to integrate family planning into curricula, the health implications of family planning, and use and significance of statistics in family planning and maternal child health. A final session was devoted to recommendations arising from the seminars; these included fostering interest in family planning through a competitive test or essay, providing up-to-date literature regularly to all teachers, placing family planning clinics under direct control of professors of gynaecology and obstetrics, and incorporating courses on demography, maternal child health, and family planning (total 85 hours) into the medical curriculum. (AC)

- 1721 Manuaba, A.** *Training doctors for the rural areas in Bali*. In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 95-97. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

In 1971, the University of Udayana in Bali, Indonesia, developed a community health programme with a view to orienting the medical curriculum to community needs. The programme, broadly, aimed to give the student an understanding of the pattern of disease and the factors influencing it; to prepare him for his role as leader of the health team; and to prepare him to organize and implement health programmes using limited resources. A region of 60 000 inhabitants, near the university, yet still rural in character, was chosen as a field laboratory. In April 1973, the first group of undergraduates was accepted. Preliminary mapping and census-taking were conducted by 2nd- and 3rd-year students, and a base of operations was set up. Their 1-month curriculum consisted in the following: studying and discussing the area with reference to the data collected; visiting several formal and informal community leaders to develop the art of personal interaction; practicing problem identification and solving; working with limited resources; discussing health centres and health teams; and conducting surveys as the basis for papers to be submitted at the end of the training period. The author concludes that, given some shortcomings, the programme provided much useful information for planning future programmes. (HC)

- 1722 Myers, W.W., Silliman, R.A., Lyons, R.B., Schwarz, M.R.** *WAMI program: a three-year progress report on regionalized medical education in the North.* In Shepard, R.J., ed.. Circumpolar Health, Toronto, University of Toronto Press, 1976, 609-612. Engl.

Faced with the increasing cost of medical education and shortages and maldistribution of physicians, the states of Washington, Alaska, Montana, and Idaho (USA) joined in a cooperative regional medical education experiment (WAMI, an acronym for the four states involved). Based at the University of Washington school of medicine in Seattle, the programme provides medical students with both basic sciences and clinical training in rural settings. The programme began in 1971, and objective evaluation of student progress over the next 3 years indicated that it had been a success. Problems of accreditation and funding had not been solved completely, but the enthusiasm of the staff, students, and medical community, plus the quality of the education received, pointed to an optimistic future for WAMI. (Modified author abstract.)

- 1723 Nchinda, T.C.** *Integrated approach to the training of health personnel for developing countries: the Cameroon experiment.* Tropical Doctor (London), 1, Jan 1974, 41-45. Engl.

At the university health sciences centre, Yaounde, Cameroon, all members of the health profession (medical, paramedical, and auxiliary) are trained as a team, although each profession has a distinct syllabus that is appropriate to the skills needed by its members. Students of the different professions attend many lectures and seminars together, and they form teams for public health field postings to areas that represent models for the whole country. The university cooperates closely with the Ministry of Health, which advises on the country's needs and pattern of health care delivery. The advantages of this relationship and the resultant training are economies in staff, buildings, and equipment and the production of professionals who understand each other's function, share common experiences in community medicine, and have been trained to work as a team. The most important problem is the complexity of planning and organizing required in multidisciplinary curricula, but international cooperation, particularly among schools pursuing similar programmes, could mitigate this problem. (HC)

- 1724 Neghme, A.** *Some basic concepts on objectives of undergraduate medical education for developing countries.* Indian Journal of Medical Education (Vellore), 12(1-2), Jan-Jun 1973, 1-7. Engl. 11 refs.

The author suggests ways in which undergraduate medical education in developing countries can be improved, the objective being to produce physicians who are able to provide adequate comprehensive medical care and who are responsive to the needs of the individual, the family, and the community. Essentially, the improvements involve review and expansion of the curriculum and modification of the teaching methods. The

curriculum must prepare the physician to cope with the social, economic, cultural, as well as technological aspects of the work and should therefore include such courses as demography, epidemiology, health services administration, and social medicine. Similarly, the teaching methods should provide the student with more practical experience and greater contact with the community — the teaching hospital should use its network of out-patient clinics and health centres for this purpose, as well as for continuing postgraduate medical education. The author concludes with a description of how the medical faculty of the University of Chile has been evolving along these lines. (MPM)

- 1725 New York Academy of Medicine, New York.** *Annual meeting of the New York Academy of Medicine: symposium on the teaching of tropical medicine, Nov 1972.* Bulletin of the New York Academy of Medicine (New York), 48(10), second series, Nov 1972, 1191-1346. Engl. Refs.

This compilation of papers, presented at a symposium on tropical medicine in the physician curriculum, brings together the philosophic insights and reflections of several experts in the field. The central theme of the papers is the need to adapt the "classical mold" of tropical medicine as taught in American and European universities to current needs in developing countries. Topics treated include the following: the nature of tropical disease; the evolution of tropical medicine; the significance of tropical medicine for the student in a temperate climate; research needs in tropical medicine; training the physician for work in the rural situation in a developing country; the tropical health care system in transition; and the role of the auxiliary in tropical medicine. (HC)

- 1726 Omran, A.R., ed(s).** *Community medicine in developing countries.* New York, Springer Publishing Co., 1974, 507p. Engl.

This textbook was specifically designed to aid physicians in the study, practice, and development of community medicine, especially in developing countries. It incorporates both the medical content and managerial methodology needed to diagnose and solve community health problems. The first section, on basic methods of community medicine, is concerned with the techniques and concepts of relevant disciplines such as medical anthropology, economics, and epidemiology. Basic health problems in developing countries are described in the second section, with chapters on nutrition, environmental health, population growth, communicable disease, etc. Section three discusses emerging health problems that accompany economic development; included are chapters on mental health, changing patterns of disease, and occupational health. Finally, section four describes the organization of community health programmes and the practical application of techniques to help solve the problems reviewed in previous sections; family planning, health education, community health systems, and data processing are some of the subjects discussed here. (MPM)

- 1727 Richmond, D.E.** *Physician with the surgical team in Quinhon.* New Zealand Medical Journal (Wellington). 81(535), 12 Mar 1975, 254-257. Engl.

A physician in the New Zealand Surgical Team operating in Quinhon, Vietnam, describes some of the main problems in the health care system. One particular problem is that patients report to hospitals only after they have sought traditional medicine or have practiced self-medication. Health personnel often have difficulty in obtaining accurate histories from patients, and inpatients who believe that they are not being cured leave hospital before being discharged. Another problem is that Vietnamese doctors prescribe drugs in combinations that may invoke iatrogenic disease. These doctors are usually competent in trauma surgery and in the recognition and management of tropical diseases, but they require training and experience in other fields. A possible solution is for specialists to visit hospitals and lecture. (HC)

- 1728 Rosa, F.W.** *Project of the Haile Selassie I Public Health College and Training Center in Gondar, Ethiopia.* Ethiopian Medical Journal (Addis Ababa). 1(72), 1962, 72-78. Engl.

A project that was initiated in 1954 at Haile Selassie I Public Health College and Training Center, Ethiopia, aims to prepare health workers for rural practice. By 1962, it had graduated 242 students; categories of workers included community health officers, community nurses, community sanitarians, laboratory technicians, and dressers (medical assistants). The course for community health officers, which is offered to those with 12 years basic education, is 4 years. Training includes social and medical sciences, public health administration, health education, laboratory techniques, epidemiology, preventive and clinical medicine, and it emphasizes methods that use limited resources. The course for community nurses is 3 years, and prepares the nurse to provide nursing and midwifery services. It also encourages students to work with parents in the homes to improve living conditions. Community sanitarians receive 2 years training beyond a basic education of 8 years. They survey sanitation problems and assist communities in implementing pure water supplies, waste disposal, and insect control measures. Laboratory technicians, who must have 9 years basic education, receive 3 years training and satisfy national standards. Dressers may have a basic education of grade 6 and undertake 1 or 2 years training. The 1st year provides them with an overview of nursing techniques and qualifies them for a certificate of "elementary dresser" (nurse's aide). A 2nd year of training qualifies them to assist in health officer and community nurse activities and eventually to staff a peripheral health station. Curricula for the courses are presented. (AC)

- 1729 Roth, R.B.** *Education of a Chinese surgeon.* Archives of Surgery (Chicago), 110, Mar 1975, 350-351. Engl.

For those who wish to enter medicine in the People's Republic of China, the process begins after completion of middle school (17 years of age). The prospective student chooses agriculture, industry, or army for the next 2 years and during this time must persuade the revolutionary committee to permit him to apply for admission into medical training. One of every three applicants will be admitted and will spend 6 months studying science before entering the 3-year programme. The first 2 years training each comprise 6 months at the teaching hospital, 5 months in the countryside, and a month vacation. During the 2nd year, students assist and perform surgery and participate generally in the sophisticated procedures of medical practice. In the final year, at the end of which students receive a certificate, 8 months are spent at the teaching hospital and 3 months in the countryside. The students are deeply involved in diagnosis, treatment, and surgery and at the end of the programme will either be stationed in the countryside or selected for specialty training. (AC)

- 1730 Sai, F.** WHO, Brazzaville. *Planning of educational programmes to meet service realities.* In Bio-medical Lectures, Brazzaville, WHO Afro Technical Papers No.4, 1972, 53-59. Engl.

Before medical education can train persons to cater to the health needs of a country, these needs must be defined. In Africa, where needs are many, priorities must be set and should include a statistics service to aid health planning, maternal child health and family planning programmes, communicable disease control and environmental health services, and nutrition and health education efforts. To translate such priorities into the education plan, the ministry of health of the country must establish how many and what types of personnel are required, how they will function in the health team, and what tasks they will carry out individually and in concert. If a physician is to assume the tasks of community leadership, diagnosis, and education, then training for these tasks must be included in medical education. To ensure their inclusion a committee that comprises representation from the ministry of health, the medical school, other training institutions, professional associations, and the ministry of education should be responsible for overseeing education for all the health professionals and should recommend changes in curriculum as health priorities require. These representatives should also map out training following basic degree programmes. (AC)

- 1731 Sathe, R.V.** *Community needs and current medical education.* Journal of the Indian Medical Association (Calcutta), 59(5), 1 Sep 1972, 206-208. Engl.

Some considerations regarding the suitability of medical education in India are set down by an Indian doctor. The response to a steadily increasing population has been, so far, to build more medical colleges, despite the difficulty in properly equipping them in terms of staff and facilities. In building too many — and possibly substandard — medical colleges the country runs the risk of (1) graduating more physicians than it can afford to

hire, and (2) inadequately preparing physicians to serve the needs of a predominately (65%) rural population. To counteract the first risk, the author recommends that either the medical profession be nationalized, or the target of one doctor per 1 000 population be dropped to one doctor per 2 500-3 000 population. With respect to the second, he makes the following recommendations: that the study load be limited to matters of functional value, particularly in anatomy and physiology; that pharmacology be abridged by eliminating some of the theoretical and experimental content, now the realm of the pharmaceutical industry; that the number of diagnostic tests, which create a dependency on sophisticated laboratory aids be reduced; that the amount of time devoted to field work in preventive and social medicine and clinical practice be increased; and that the student be taught to guard against expensive prescribing habits encouraged by the pharmaceutical industry. (HC)

- 1732 Udupa, K.N.** *Ayurvedic system of medicine in India.* In Newell, K.W., ed., *Health by the People*. Geneva, WHO, 1975, 53-69. Engl. 21 refs. See also entry 1477.

The 3 000-year-old system of Ayurvedic or Hindu medicine has its roots in the philosophies and scientific methods that prevailed in India from 600 B.C. to 700 A.D. According to Ayurveda, illness is the result of an imbalance between body humours and psychic factors that finds expression in a specific organ or tissue (e.g., a lesion). Prevention is practiced in the form of personal and social hygiene, the use of rejuvenating drugs, and the practice of yoga. Cure is effected through medicinal preparations, surgery, or treatment by psychosomatic means. At present, there are about 150 000 registered Ayurvedic practitioners, a third of whom have been institutionally trained; another estimated 200 000 unqualified and unregistered practitioners operate in the rural areas. Although the former are likely to make use of modern as well as Ayurvedic drugs, the latter tend to rely on purely Ayurvedic treatment. Because these rural Ayurvedic physicians are resident in, and generally preferred by, rural communities, and because they command a lower salary than do modern medical graduates, they could, with additional training in community health and modern medical science, solve the problem of staffing India's primary health centres and dispensaries. (HC)

- 1733 Universidad de Guadalajara, Facultad de Medicina, Guadalajara. Municipio de Zapopan, Hospital Civil, Guadalajara. Proyecto Zapopan. (Zapopan project).** Guadalajara, Universidad de Guadalajara, n.d. 67p. Span.

The Zapopan project is designed to give medical students at the University of Guadalajara, Mexico, experience in community health work. The project has three objectives: (1) teaching: to set up a health education unit that will instruct and involve the students in all aspects of public health; (2) health services: to organize a health care delivery system for the municipality of Zapopan with emphasis on maternal child health, preventive medicine, and self-help; and (3) research: to

evaluate the Zapopan health situation -- cultural, administrative, clinical, etc. aspects -- and to carry out national and international comparative studies. The proposal includes extensive information about the University of Guadalajara medical school, the resources available for this project, estimated budgets, lists of personnel and equipment required, means by which to evaluate the project, and statistical data on the population of Zapopan. (RD)

- 1734 Watson, E.J.** WHO, Geneva. *Meeting community health needs: the role of the medical assistant.* WHO Chronicle (Geneva), 30(3), Mar 1976, 91-96. Engl. 13 refs.

Some considerations regarding the role and training of medical assistants (auxiliary health workers) are set forth with reference to the author's experience in Papua New Guinea. He describes the auxiliary function as threefold: to teach people about health, the prevention and treatment of common diseases, and family planning; to provide the means for simple prevention of the common causes of sickness; and to treat these conditions. He recommends that training be suited to the task required, that standard regimens be prepared for the treatment of common conditions, and that background knowledge be kept to a minimum. He contrasts two ways of teaching diagnosis: requiring the student to learn vast quantities that he must integrate himself and demonstrating differential diagnosis with patients as examples. The latter, or "short circuit" approach, requires more teaching staff but produces more efficient results. Finally, he points out that training should be aimed at producing a contented worker; thus, skills of diagnosing illness without advanced clinical tools should be stressed, and adequate opportunities for promotion, rewards, job interest, and job satisfaction should be provided. (HC)

- 1735 WHO, Geneva.** *Helping medical students to learn.* WHO Chronicle (Geneva), 27(4), Apr 1973, 157-158. Engl.

Some of the shortcomings in methods used to examine medical students in Sri Lanka, as observed by a WHO working group of medical educators, are indicated. Students were being graded mainly on the basis of essay questions and oral examinations, methods that introduced a strong element of chance since only a narrow field of study was covered, and examiner bias was almost inevitable. Similarly, the small number of cases included in the clinical section of the examination could test only a small part of the student's skills. Furthermore, there was little assessment during the course of study so that too much emphasis was being placed upon the final examination. Improvements in the examination system are now being devised; it is suggested that oral examinations should not be used for assessing the student's memory, the number of essay questions should be reduced, and in their place, increasing use should be made of the more objective, multiple choice questions. (MPM)

- 1736 WHO, Geneva.** *Use of health service facilities in medical education: sixteenth report of the WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel.* Geneva, WHO Technical Report Series No.355, 1967. 36p. Engl.

A look at hospital-based training for medical students reveals that it does not produce community-oriented physicians; therefore, physician educators should consider utilizing alternative settings for medical education. Centres for ambulatory care such as hospital outpatient departments, polyclinics, curative and preventive specialty clinics, physicians' offices, and health centres offer varying degrees of involvement with families and communities and should be explored. Domiciliary care is another possibility and should be seriously contemplated, because it places the medical student in direct contact with environmental factors that influence health. Home visiting can be integrated into medical education programmes through case follow-up, family adviser schemes, and hospital domiciliary services. Public health activities also represent opportunities for community interaction; those especially suitable include mass screening for detection of disease, mass disease control programmes, health education, etc. Through participation in programmes, such as these, students should develop skills of community diagnosis and should learn to analyze the effects of environment on health. Subjects that should be included in the medical school curriculum and examples of supportive field activities are presented, and the responsibilities of teaching staff are discussed. Appended are tables of undergraduate teaching programmes and of phases of teaching at the medical school, University of Valle, Colombia. (AC)

- 1737 WHO, Geneva.** *Training of the physician for family practice: eleventh report of the Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel.* Geneva, WHO Technical Report Series No.257, 1963. 37p. Engl.

Because of the trend toward specialization by medical students, a WHO committee on professional and technical education of medical and auxiliary personnel met to discuss the training of physicians for family practice. It identified the continuing need throughout the world for family physicians and cited examples in which countries had lowered educational standards or had produced health auxiliaries to meet that need. The committee also discussed the objectives of family medicine and the attributes that are desirable in a family physician. It examined the relationships between the family physician and institutions, specialists, and auxiliary personnel and detailed the four phases for training in family practice — undergraduate training, internship, postgraduate training, and continuing in-service training. Recommendations were that medical schools provide students with some training within the family practice setting; that postgraduate study be required for students choosing family practice; that efforts be made to

induce practicing family physicians to undertake continuing medical education; that more research be done both in and for family medicine; that more family physicians be members of medical faculties; and that emphasis in training be placed on the role of the family physician as a member of the health team. (AC)

- 1738 WHO, Geneva.** *Recommended requirements for schools of public health: tenth report of the Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel.* Geneva, WHO Technical Report Series No.216, 1961. 24p. Engl.

This report was based on data gleaned from questionnaires for some 50 schools of public health or institutions fulfilling a similar purpose in 32 countries. For working purposes, a school of public health was defined as one that offers postgraduate training in public health for a minimum of 1 academic year. A general discussion of schools of public health according to their objectives (teaching, research, and service to the community), organization and administration, facilities and teaching staff, and curriculum is followed by a list of recommendations. The following were included among them: that schools of public health give suitable attention to research, especially community health and operational or administrative research; that wherever possible, the school of public health be affiliated with a university; and that the curriculum be constructed around five major subjects, i.e., public health administration, principles and practice, health statistics, environmental health, and microbiology. A selective summary of information on the schools surveyed is appended. (HC)

- 1739 WHO, Geneva.** *Training in health education of professional and auxiliary personnel at graduate and post-graduate levels: Expert Committee on Training of Health Personnel in Health Education of the Public.* Geneva, WHO Technical Report Series No.156, 1958. 40p. Engl. 18 refs.

Every health worker who is in contact with people should exercise his influence positively through health education, and educating personnel to do this should be a specific goal of all training programmes for health manpower. The objectives of training for health education should be determined by the roles of different members of the health team, but curricula should include general orientation to public health and community programmes; health education opportunities; the learning process; methods, skills, and techniques; planning, preparation, pretesting, selection, production, use, and evaluation of audiovisual materials; and principles and techniques of evaluation and research. Effective teaching methods are those that involve the target person in the learning process and that take into account his interests, e.g., interviews, demonstrations, group discussions, sociodramas and role playing, and field studies or observation trips. Health personnel should be made aware that target populations for health education are not only sick persons but students of all ages,

parents, leaders of occupational groups and trade unions, political leaders and policymakers, and the media. (AC)

- 1740** Wig, N.N. WHO, Geneva. *Training of psychiatrists*. In Baasher, T.A., Carstairs, G.M., Giel, R., Hassler, F.R., eds., *Mental Health Services in Developing Countries*, Geneva, WHO Offset Publication No.22, 1975, 111-117. Engl.
See entry 1743 for complete proceedings.

The problem of training psychiatrists in developing countries is considered in light of the experience gained in India over the last 2 decades. It is suggested that the best training in psychiatry can be given in one's own social milieu, and training centres should be developed at local and regional levels in different parts of the world. The programme not only should provide training in clinical psychiatry but should also aim at equipping the future psychiatrist with knowledge, skill, and attitude to fulfill his new role as a leader of a mental health team in developing countries. The minimal requirements for training centres and some special problems they face in developing countries have been discussed. (Modified author abstract.)

IV.1.2 Nonprofessional

See also: 1407, 1414, 1416, 1419, 1422, 1427, 1428, 1431, 1438, 1456, 1460, 1463, 1465, 1480, 1502, 1530, 1547, 1569, 1600, 1658, 1670, 1701, 1703, 1707, 1711, 1716, 1720, 1723, 1728, 1739, 1834, 1870, 1901, 1910, 1911, 1916, 1919, 1924, 1925, 1930, 1942, 1943, 1945, 1946, 1963, 1966, 1967, 1973

- 1741** Ademuwagun, Z.A. *Birth of the first centre for professional preparation in health education in Africa*. International Journal of Health Education (Geneva), 19(3), 1976, 189-194. Engl.

The University of Ibadan, Nigeria, has established postgraduate programmes offering specializations in various public health disciplines, including health education and thus has become the first African Regional Health Education Centre. The centre, which has had input from government officials, UNICEF, and WHO is open to all English-speaking Africans. A similar francophone centre is tentatively planned for Yaounde, Cameroon. The Ibadan centre initiated two programmes for the 1975-1976 academic year: a postgraduate 2-year course of studies leading to a master of public health degree with specialization in health education, and a nongraduate 1-year programme leading to an advanced diploma in health education. Admission requirements, detailed course descriptions, and projected job opportunities for graduates are included for both programmes. (RD)

- 1742** Andrus, L.H., Fenley, M.D. *Evolution of a family nurse practitioner program to improve primary care distribution*. Journal of Medical Education (Chicago), 51(4), Apr 1976, 317-324. Engl. 9 refs.

The family nurse practitioner programme of the University of California (USA) has effectively improved the distribution of primary health care manpower in medically underserved areas. This has been accomplished by selecting students, preceptors, and faculty from areas of need; decentralizing the clinical and didactic training sites; developing a competency-based, portable curriculum; and coordinating it all with a circuit-riding, institutionally based faculty. (Journal abstract.)

- 1743** Baasher, T.A., Carstairs, G.M., Giel, R., Hassler, F.R., ed(s). WHO, Geneva. *Mental health services in developing countries*. Geneva, WHO Offset Publication No.22, 1975. 132p. Engl.

Individual articles have been abstracted separately under entries 1458, 1740, and 1803.

A WHO seminar was held in 1973 to examine mental health services in the developing countries; the papers from that seminar have been assembled in this document. The collection has been divided into six self-explanatory sections: concepts of mental illness, the needs of the population, delivery of mental health care, planning of mental health services, training of mental health workers, and evaluation of mental health services. Within these divisions, the papers address particular issues, such as essential legislation, mental illness in South India, and cultural views and traditional forms of treatment. Individual papers include references and appendices. (AC)

- 1744** Backs, M., Bicknell, W.J. *Medical assistant: a compendium*. San Francisco, Office for Health Affairs, Office of Economic Opportunity, Jul 1970. 459p. Engl. 161 refs.

A project to train native Alaskans as middle-level auxiliaries was undertaken by the Office of Economic Opportunity (OEO). To gather background for suitable curriculum and lesson plans, the project administrators contacted officers of similar programmes throughout the world, particularly in the USA. They also obtained four literature searches from the National Library of Medicine, and the results of their investigation have been assembled in this document. Curricula from civilian and military courses are outlined, and resource personnel are cited. Selected correspondence as well as abstracts and excerpts from published material are also included. Appended is a catalogue of related materials that were placed on file at OEO, 100 McAllister St., San Francisco, California. (AC)

- 1745** Behrhorst, C. Christian Medical Commission, World Council of Churches, Geneva. *Guatemala*.

In Christian Medical Commission: Annual Meeting 1973, Geneva, Christian Medical Commission, 1973, 17-25. Engl.

See entry 1441 for complete proceedings.

The author assisted a population of 200 000 in Guatemala in solving its own health problems by acting as liaison between community spokesmen and experts outside the community. The spokesmen, upon the author's suggestion, banded together to form community betterment committees, one of which oversees health development. The health committee, among other activities, selects indigenous individuals to train as rural health promoters. The training programme (run by the author) aims at teaching the student to recognize and treat common medical problems. When the student completes training, his practice is carefully supervised by the training centre; discipline, however, is undertaken by the health committee, which also sets his fees. He is required to return to the centre once a month and pass a written examination; if he fails, he is not permitted to buy medicines. Some health promoters need greater supervision than is offered by regular testing; therefore, the training centre regularly sends a "visiting supervisor" to observe practices. (AC)

1746 Bennett, F.J., Jelliffe, D.B. *Training for child care in tropical regions.* International Journal of Nursing Studies (Oxford), 4(1), 1967, 1-6. Engl.

This paper describes how the training of nurses, midwives, health visitors, medical assistants, and other auxiliary health workers could be modified and standardized to help improve child care in developing countries. The range of child care services available at different levels is outlined, including special outpatient clinics at large hospitals, immunization and health education campaigns of district hospitals, and community-oriented activities of the local village health centre. A basic training programme should be designed so as to enable any child care worker to function adequately in any of these settings as circumstances demand; listed are 16 tasks for which training should be given, e.g., diagnosis of common childhood illnesses, home visiting, health education, record keeping. The curriculum must, therefore, be expanded to incorporate directly relevant subjects such as nutrition, community and family aspects of health, child development, immunization, etc., and the emphasis during training should be placed on practical experience. Finally, the authors point out that tutors for such a course will require a new training programme themselves. (MPM)

1747 Benton, J.G., Gubner, R.S., ed(s). *Education in the health-related professions.* Annals of the New York Academy of Sciences (New York), 166(3), 31 Dec 1969, 824-1058. Engl.

Individual chapters have been abstracted separately under entries 1792 and 1800.

A conference on education in the health-related professions generated this compilation. The reports have been divided into five sections — one devoted to articles of general interest, one to articles dealing specifically with the phenomenon of health science centres, and others

covering new directions, experience abroad, and training in fields of nursing, social work, medical technology, etc. Although the emphasis is on the USA, some information may be adapted elsewhere. (AC)

1748 Boohene, A.C. *Physician assistant utilization in a developing country (Ghana).* World Medical Journal (New York), 19(2), Mar-Apr 1972, 35-37. Engl.

Two types of medical auxiliary or physician assistant are being trained and utilized in Ghana. These are the health centre superintendent and the nurse anaesthetist. The former is a multipurpose, the latter a unipurpose, medical auxiliary. Both cadres are selected from experienced male and female nurses. The health centre superintendent is trained for 1 year by medical officers and other experienced health workers and is utilized for curative, promotive, and preventive health work in rural and urban health centres. He works under the supervision of a medical officer. Usually such supervision is remote in the rural health centre but quite close in the urban setting. He is forbidden to undertake private practice. Career prospects and remuneration are relatively poor, but these are currently being reexamined. The nurse anaesthetist is trained for 6 months by accredited anaesthetists and works mainly in hospitals throughout the country. He works under the supervision of a physician and is not permitted to practice privately. Career prospects and remuneration are similar to those of the health centre superintendent. (Modified author abstract.)

1749 Brosseau, J.D. *Medex on the northern plains.* HSMHA Health Reports (Rockville, Md.), 88(4), Apr 1973, 17-19. Engl.

Medex is a programme designed to alleviate the doctor shortage in the northern United States by supplementing the training of former military medical corpsmen and deploying them in underdoctored areas, such as rural North Dakota. The training course lasts 12 months and, in cooperation with the Indian Health Service, is offered to Indian students to prepare them as physician assistants for northern reservations. Two-thirds of the course involves direct instruction from a physician-preceptor; the final third combines formal classroom study with clinical rotations away from the tutor. The curriculum emphasizes relevant skills that are not already held by the trainee. On completion of the course, the trainee is hired automatically by his preceptor. The medex graduate is responsible for taking medical histories and performing physical examinations, screening and treating emergency cases, setting routine fractures, suturing, and acting as first assistant in surgery. Other duties include certain laboratory tests, X-ray examinations, and other therapeutic and diagnostic measures. The programme receives strong support from the public and from doctors who perceive it as a means of providing more complete and efficient service. (ES)

1750 Brown, H.W. *Lessons from the rural economy of Guatemala.* Annals of the New York Academy

of Sciences (New York), 166(3), Dec 1969, 1014-1016. Engl.

The paper relates to the health and medical activities of Dr. Behrhorst among the Indians at Chimaltenango in Guatemala. The clinic treats 130 patients a day with the assistance of hospital-trained nurses and assistant nurses trained by Dr. Behrhorst himself. Relatives stay in the hospital to provide food and assist with the nursing care of inpatients. Dr. Behrhorst has trained 50 health workers to provide health education in basic nutrition and sanitation and to recognize and treat, at home, common medical problems. Literate health workers have been selected from their communities and trained for up to 3 years. Teaching covers history taking, observation, a modest amount of physical examination and basic therapy. They charge only a nominal fee for their services, and refer complicated cases to Behrhorst's hospital. In sanitation, emphasis is placed on building and using a privy, clean water supplies, food hygiene, and hand washing. With the assistance of the government agricultural agent, the health workers help the community by operating demonstration farms for vegetable and animal production. The sanitation and nutrition programmes have long-range goals that will raise the health standards of the Indians.

- 1751 Budjav, L.** *Formation et l'utilisation des feldshers dans la Republique Populaire de Mongolie et leurs perspectives. (Education and utilization of feldshers in the Mongolian People's Republic and their professional prospects).* Sante Publique (Bucharest), 17(4), 1974, 411-414. Fren.

The foremost national medical cadre in the People's Republic of Mongolia is the feldsher. Historically, feldshers played a crucial role in the control of infectious diseases (smallpox, plague, typhus, venereal disease, etc.); today, feldshers and feldsher-midwives provide preventive and curative services, obstetric assistance, environmental sanitation, and occupational health in Mongolia's rural medical posts. In addition, they play a crucial role in health education and hygiene. In hospitals and clinics, they function as middle-level statisticians, health educators, disinfectors, research assistants, and chief nurses. In view of the diversity of functions of the feldshers and constant development in the Mongolian health service, the feldsher's curriculum, unlike those of other cadres, has remained flexible. The number of feldshers graduating each year continues to increase; at present there are 4.9 per 10 000 population. Recognizing the importance of the feldsher, the government has set a goal of 40 feldshers (of diverse functions) per 10 000 population by 1990, and to achieve this, plans to increase the number of students admitted to feldsher courses. (HC)

- 1752 Chesney, C.** *Community health worker project: draft curriculum outline phase I-V-VI, April 1972-1974.* Winnipeg, Canada, New Careers Forum, n.d. 1v.(various pagings). Engl. Refs.

Manitoba's community health worker programme aims at extending basic and emergency health services to isolated northern communities by training indigenous persons as community health workers. This volume contains the curriculum for phases one to five of the courses for community health workers. As well, a detailed, illustrated instruction manual is included for phase five (eye, ear, nose, and throat conditions, their recognition and treatment) and phase six (obstetrics, care of the newborn, and contraception), which aims at a deeper understanding of material already covered in phases one to four. (HC)

- 1753 Connelly, T., Assell, R., Peck, P.** *Interdisciplinary education for health science students in the rural home health agency.* Public Health Reports (Rockville, Md.), 90(4), Jul-Aug 1975, 325-330. Engl.

An experiment undertaken at the University of Kentucky (USA), which directly involves students in rural health care, has proved successful and has produced some evidence that students in this type of programme may engage in rural practice after graduation. The programme includes a brief orientation on campus and 3 weeks in the field. From 1972-1975, more than 300 students from health-related disciplines entered rural communities and shared in either clinical or observation teams. Members of clinical teams obtained medical records of patients and familiarized themselves with the histories. They accompanied qualified staff in home visits and offered their comments in discussions about the patients. Students in observation teams did not provide care but observed the experiences of their classmates and offered advice. Besides giving students a more realistic view of clinical practice outside the "ivory towers" of a health sciences centre, the experiment stimulated at least 25 students to enter practice in communities they had visited. (AC)

- 1754 David, H.P.** WHO, Geneva. *Training and utilization of feldshers in the USSR.* WHO Chronicle (Geneva), 26, 1972, 299-301. Engl.
Appeared also in Journal of Psychiatric Nursing and Mental Health Services (Philadelphia), Jan-Feb 1973, 32-34.

This is a brief account of the subjects discussed during a WHO traveling seminar on the training and utilization of medical assistants (feldshers) in the USSR. The seminar was designed to show the roles of different types of feldsher in relation to other health personnel and to the health service as a whole. The number of feldshers is substantial: in 1970 there were 1.944 million allied health personnel in the USSR, of whom about half were nurses and 550 000 were feldshers and feldsher-midwives. This article outlines their training (entrance qualifications, course structure, etc.) and duties performed — some are first-aid workers, others have more specialized training, e.g., laboratory technicians and sanitarians. In addition to working in hospitals, factory medical centres, and other urban locations, feldshers are used extensively in rural areas where there are 75 000 feldsher-midwife centres, the basic medical unit

in rural communities. There, with a certain degree of autonomy, the feldsher provides vaccinations, health education, and simple or emergency medical care; however, there is regular supervision by a doctor from the district hospital. This system works particularly well in the USSR where there are a large number of doctors, but it could be adopted in other countries despite their shortage of professional staff. (MPM)

- 1755 de Castro, E.I.** *Guidelines in organizing community class and community development unit.* Mandaluyong, Philippines, Association of Municipal Health Officers of the Philippines, n.d. 2p. Engl.

A project in the Philippines to incorporate women resident in the barrios into the health services is under way. The women who are selected must be high-school graduates, aged 20-40, acceptable to the community, and willing to accept responsibility. They must also be recommended by influential persons in their barrio. After they are trained, the women form community development units, which include four chairpersons — one each for family planning and nutrition, first aid, food production, and environmental sanitation. The duties of each chairperson are set forth and correspond to her title. For instance, the chairperson on family planning and nutrition is expected to know the number of married women in her area; to report to the midwife on how many are pregnant; and to help with registering vital statistics, performing immunizations, and providing nutrition and family planning education. She also assists in feeding programmes and gives simple nursing care to mothers and children. (AC)

- 1756 Diaz Esparza, A.** *Programa de adiestramiento de personal auxiliar en salud publica. (Program of education of auxiliary public health personnel).* Salud Publica de Mexico (Mexico City), 7(3), May-Jun 1965, 403-407. Span.

The need for auxiliary health personnel in Mexico to serve vastly different rural populations has been recognized, and programmes for training them have been introduced. In these programmes, attempts have been made to prepare the students not only for the health problems they will find but the social and cultural differences they are likely to meet. Courses offered in 1965 included auxiliary training in laboratory procedures, nursing, dentistry, nutrition, public health, and sanitation; they varied in length from 1 month to 1 year and totalled 1 002 students. Although much of the training took place in Mexico City, there were centres for auxiliary nursing, public health, and nutrition elsewhere. (AC)

- 1757 Duke University Medical Center, Durham, N.C.** *Conference on current status and development of physician's assistant program.* Durham, N.C., Duke University Medical Center, Oct 1968. 1v.(unpaged). Engl.
Conference on Current Status and Development of Physician's Assistant Program, Durham, N.C.,

28 Oct 1968.

Unpublished document.

The physician assistant can play an important role in maintaining high standards of patient care by relieving the physician of his more onerous or repetitive tasks. The physician assistant, however, is only as good as his education; the importance of proper training and well-designed but flexible programming are emphasized in these discussions of his role as it is evolving in the United States today. Topics of discussion include student selection and evaluation, existing training programmes and various comparative aspects of each, the role of government in the training and deployment of physician assistants, and legal problems regarding them. Job descriptions of eight physician assistants reveal that the role is as yet personal (i.e., determined by the needs of the particular physician with whom the assistant works) rather than occupational; the only characteristic shared by all assistants interviewed was subordination to a physician. The training of more physician assistants, especially for use in general practice, is heartily endorsed in the closing remarks. It is recommended that all physician assistant trainees undergo 1 year of core curriculum, followed by courses toward general practice or a specialization. (HC)

- 1758 Faghhi, M.A.** *Role of schools of public health in the training of auxiliaries.* Iranian Journal of Public Health (Teheran), 1(3), Winter 1973, 109-121. Engl. 16 refs.

In order to help reconcile the limited training facilities in developing countries with the demand for more health personnel, the author urges schools of public health to participate more in the training of auxiliary health workers, rather than confining themselves to postgraduate education. This participation should not be restricted to direct training of auxiliaries; by working more closely with other training institutions, the schools of public health could also help determine the types of auxiliary required, the design of their training programmes, the preparation of their teachers, and accreditation of the courses. Also briefly discussed are the classification of different types of auxiliary health worker, the opportunities for training them, some generally applicable principles to be incorporated into their curricula, and the preferred qualifications of their teachers. (MPM)

- 1759 Fournier, G., Djermakoye, I.A.** *Village health teams in Niger (Maradi Department).* In Newell, K.W., ed., *Health by the People*, Geneva, WHO, 1975, 128-144. Engl.
See also entry 1477.

The rural health organization — a network of rural dispensaries staffed by nurses — in the regional subdivision of Maradi, Niger, was greatly improved by the introduction of the village health team. The team comprises a village health worker and a traditional midwife. The former is a volunteer chosen by the villagers and given training in hygiene, elementary and emergency care, health and nutrition education, record keeping, and the dispensing of drugs. The traditional birth

attendant is taught hygiene, how to recognize birth complications, how to administer eyedrops to the newborn, etc., and is provided with a midwifery kit and a book in which to record births. Both the village health worker and the traditional birth attendant are regularly supervised by the nearest nurse. In addition, the nurses are responsible for collecting epidemiological data, a task that makes them more aware of their impact on village health, and encourages them to instigate new health activities. These extension techniques have given the health team the support it needs to perform successfully and have sensitized the health organization to the particular needs of each village. (HC)

- 1760 Freyvogel, T.A.** *Die ausbildung von "medical assistants" in Tansania. (Education of medical assistants in Tanzania).* Bulletin Schweizerische Akademie der Medizinischen Wissenschaften (Basel), 30(4-6), Oct 1974, 230-236. German.

In the United Republic of Tanzania, it is the government's policy to expand the health services to make them available to large parts of the rural population. Medical assistants play a key role, directing health centres, assuming responsibility for hospital departments, or undertaking special tasks. Their curriculum, which was revised in 1973, is now 3 years and emphasizes preventive medicine. At present, there are five medical assistant training centres (MATCs) in Tanzania, the most recent one being in Ifakara. This one has its origin in the former rural aid centre, which was founded in 1961. At the request of the Ministry of Health, the rural aid centre was expanded to a capacity of 120 students, transformed into an MATC, and placed under the directorship of the chief officer of St. Francis Hospital, Ifakara. The teachers are medical and paramedical staff of St. Francis Hospital and workers of the Swiss Tropical Institute, Basel. Government officials also participate in teaching. Learning is essentially achieved by doing, and field-work is substantial. (Modified journal abstract.)

- 1761 Gourley, D.** *Pharmacy and nursing in a rural health education program.* American Journal of Pharmaceutical Education (Des Moines), 38(4), 1974, 598-602. Engl.

Recognizing the need for pharmacy services in rural communities and hospitals, the University of Nebraska (USA) College of Pharmacy instituted a rural health programme in 1973. The programme was based on a 4-week course, which was designed for students of pharmacy and nursing. It aimed to give them skills in diagnosing needs of small communities and to cultivate in them a perception of their role in the health team. Although the course mainly comprised activities in pharmacies, hospitals, nursing homes, and a mental health clinic, it included some lectures by college and civic authorities, as well as health professionals. At the end of the course, the student evaluated these experiences; provided continuing education courses to other practitioners on aspects of pharmacology; and promoted public interest in his future position through public meetings, and radio and newspaper interviews.

The success of the programme for both students and community has generated interest in other areas. Future programmes will concentrate on the development of pharmacy services in rural hospitals with specialized training for nurses and present pharmacy consultants as well as students. (ES)

- 1762 Harinasuta, C.** *Need for clinical assistants in Thailand.* Lancet (London), 1(7815), 9 Jun 1973, 1298-1300. Engl. 8 refs.

The Government of Thailand's increasing use of medical auxiliaries stems from the recognition that there are not enough qualified personnel to give adequate care in rural areas where the ratio of doctors is 1:14 500. Training programmes have been set up in recent years to produce assistant nurses, assistant midwives, assistant laboratory technicians, assistant health inspectors, and junior health workers. These personnel are, however, of limited value since their training is slight (18 months), and the present plan is to set up a programme to train a medical auxiliary of higher calibre called a "clinical assistant." Clinical assistants, trained for 3 years after the completion of secondary school, would diagnose and treat the more common diseases and infections, referring only seriously ill patients to the closest hospital. In the absence of a midwife, they would care for pregnant women and conduct normal deliveries. Where a doctor is present, the clinical assistant would perform tasks such as history taking and physical examinations. The country's requirement in clinical assistants was estimated at approximately 2 500 in 1973. If this project is accepted, a first training course will accept 100 applicants, with a view to expanding the programme if results are satisfactory. (HC)

- 1763 Hasan, K.Z.** *Rural health guards in the northern areas of Pakistan: a preliminary evaluation.* Assignment Children (Geneva), 33(1), Jan-Mar 1976, 78-87. Engl. 12 refs.

A new approach to health care delivery is being evaluated in an inaccessible area of northern Pakistan where health services were previously nonexistent. To be effective, a health care system must be very close — both geographically and culturally — to the community it is to serve. Instead of relying on sophisticated Western practices, the system described in this article is based on local health workers ("health guards") who have been selected by their own community and have undergone 6-8 weeks of basic training given by a mobile teaching team. The curriculum includes physiology, anatomy, sanitation, the recognition and treatment of common diseases, vaccinations, and first aid; female health workers also take a course in obstetrics. Except for this brief training period, the health guards are not compensated for their services and they perform their health work part-time while continuing their normal occupation. Between February 1974 and September 1975, training programmes were held in 59 different locations, and 898 male and 590 female health guards were trained (the target was 720 teams, each consisting of one male and one female health worker). Community acceptance of the health guards has been good,

and the scheme has demonstrated that, given sufficient encouragement and support, even the most deprived community can be motivated to take an active part in solving its health problems. (MPM)

- 1764 Hoff, W.** *Role of the community health aide in public health programs.* Public Health Reports (Rockville, Md.), 84(11), Nov 1969, 998-1002. Engl. 21 refs.

Recognizing that some Americans are deprived of adequate health services, various health agencies in the United States have experimented with the use of community health aides. All these aides are selected from the communities in which they are to serve, but each agency sets its own standards of training and responsibility. These auxiliaries have undertaken roles in health education, communicable disease control, maternal and child health, dental health, family planning, and environmental health, and they have successfully bridged the gap between their patients and middle-class practitioners, increased communication, and significantly improved the delivery of health services. At present, the need for and the effectiveness of these workers have been established; now it remains to formalize their training and to establish mobile career opportunities to encourage participation and enthusiasm. (ES)

- 1765 Janssens, P.G.** *Why medical auxiliaries in the tropics? Lessons of a meaningful past.* Bulletin of the New York Academy of Medicine (New York), 48(10), Nov 1972, 1304-1313. Engl.

In the early 1900s, Belgian doctors introduced auxiliary training programmes into preindependence Zaire. These programmes were basically apprenticeships for dressers, dispensers, smallpox vaccinators, and microscopists (mainly male). Later, the *agent sanitaire* was introduced. He supervised a sector's health team, conducted annual censuses, maintained health buildings and equipment, and oversaw vector control, environmental sanitation, and sanitation inspection. Next, training programmes were developed for the medical assistant. Although this cadre was originally intended as a realistic substitute for physicians, the training, which was long and specialized, was itself not realistic. Attempts to remedy training drawbacks were first blocked by the overseas authorities and later by individuals who argued that only the best training would be acceptable for health workers in the tropics. Some problems also arose from international trends to standardize the training and terminology for the medical assistant. The author comments that a national health policy, which supports health care for all, requires auxiliary health personnel to offset physician shortages, and that such personnel should be trained according to national health priorities, not international standards. (AC)

- 1766 Jhala, H.I.** *Composition and education of the health team: education of the health team.* Indian Journal of Medical Education (Bombay), 11(2-3), Apr-Sep 1972, 137-141. Engl.

Every member of India's health team should have an appropriate and organized form of education in order to perform his assigned tasks. The social scientist is a valuable member of the team and should be given intensive training. Although the social scientist is frequently available in urban areas, he is seldom attracted to rural work. More institutions, therefore, should train social scientists suited to the needs of the rural community. Functions of the psychiatric social workers, VD social workers, TB health visitors, leprosy SET technicians, etc. should be integrated, and opportunities to upgrade status through training should be offered to all health personnel. For instance, an auxiliary nurse-midwife should be allowed to learn to be a basic health worker, etc. At present there is also a need for dental hygienists and technicians and for rural and mobile dental clinics. The existing diploma and degree courses in pharmacy should be expanded, and postmatriculation diploma courses should be started in each medical college to train food inspectors and public health analysts. (Modified author abstract.)

- 1767 Knight, J.L., Hammond, E.K., Hauser, L.D., Baumgartner, R.P.** *Decentralized pharmacy technician training in a rural health care system.* American Journal of Hospital Pharmacy (Washington, D.C.), 31(3), Mar 1974, 272-274. Engl.

To fill the need for pharmacy assistants in rural areas, in 1971 the Appalachian Regional Hospitals (USA) designed a structured course for pharmacy technicians. The aim of the course is to produce personnel who can prepare medications, assume responsibility for the technical operation of drug distribution, and manage both drug supplies and office staff. The course consists of home study in pharmaceutical law, mathematics, chemistry, drug preparation and manufacture; hospital procedures; anatomy, physiology, pharmacology, and toxicology; and office administration and management. These studies are supplemented by on-the-job practice and written and oral examinations. The home study aspect encourages local participation in the programme. (ES)

- 1768 Lippard, V.W., Purcell, E.F., ed(s).** Josiah Macy, Jr. Foundation, New York. *Intermediate-level health practitioners.* New York, Josiah Macy, Jr. Foundation, 1973. 232p. Engl.

Eighteen papers delivered at a conference on the medical assistant and equivalent health workers have been compiled in this publication. They review the interrelationships of physicians, nurses, and the new health practitioners; methods of evaluating performance; accreditation of training programmes; certification; and the economic and legal implications. Although they are USA-oriented, they do provide some insights that are generally applicable. (AC)

- 1769 Lisowski, F.P.** *Barefoot doctor.* Eastern Horizon (Hong Kong), 15(1), 1976, 20-26. Engl.

A detailed account is given of the training and job description of the medical cadres responsible for the remarkable transformation of the health situation in the

People's Republic of China: the barefoot doctor, the worker doctor, the neighbourhood health worker, and the brigade midwife. An interesting aspect of medical education in China is its ongoing nature; barefoot doctors spend from 1 day a week to 1 day a month in "continuing work-study" with fully qualified doctors in a commune hospital or health centre. Also, upward mobility is built into the system, so the barefoot doctor or nurse may enter medical school and indeed is given highest priority. A chapter-by-chapter summary of a sample textbook (*Textbook for barefoot doctors: a refresher course*, edited by Kirin Medical College, 1972. 560p. illus.) is included to indicate proficiency expected of the barefoot doctor. (HC)

- 1770 Lutwama, J.S.** WHO, Brazzaville. *Place of public health education in programmes for the training of health team personnel*. Brazzaville, WHO, Afro Technical Papers No.3, 1971. 44p. WHO/AFR/RC21/TD/1. Engl. 10 refs.

As elsewhere in the world, health services in the WHO African Region are becoming oriented toward public health, and this changing situation must be reflected or anticipated in the training programmes for different categories of health personnel. This paper deals not with the training of specialists in the field of public health but with the training of members of health teams. First of all it gives a general account of some basic objectives for a comprehensive public health programme. It discusses the demographic situation, the types of health problem, assessment of priorities, the organization of basic health services (especially via health centres), and the corresponding manpower requirements. It then describes the tasks of specific categories of health personnel (including the medical assistant, sanitation auxiliary, professional health visitor, auxiliary community nurse, and laboratory assistant). Having established the requirements, the paper discusses the teaching of public health — educational objectives, the scope and format of training programmes, physical facilities, teacher training, and programme administration. Although generally applicable to the whole region, most of the examples cited in the paper have been based on the author's experiences in Uganda. (MPM)

- 1771 Madjaric, D.I.** WHO, Alexandria. *Assignment report: Public Health College and Training Centre, Gondar, 3 Jan-22 Nov 1971*. Alexandria, WHO, 1972. 23p. WHO/EM RO/72/131. Engl. Unpublished document.

From 1957 to 1971 the Public Health College and Training Centre (Ethiopia) trained more than 1 000 auxiliary health workers — primarily health officers, community nurses, and sanitarians; an analysis of the experience gained during that time indicates a need for some changes in the respective courses. The health officer, whose curriculum increasingly resembles that of a physician, has become removed from the other members of the health team and needs reorientation. The community nurse, on the other hand, has become the most valuable member of the health team and the most

trusted health worker in the countryside. The community nurse course, which is a combination of theoretical and practical work, lasts 3 years and provides practice in clinical care and public health. The only danger for this course may be in recruiting more students than there are positions to fill. Finally, the course for sanitarians has proved the least satisfactory; facilities for practical training are limited and the students have too much free time. Recommended changes are to expand training to include more disease control measures and to popularize the work by assigning graduates to affluent areas. Course curricula and timetables are appended. (AC)

- 1772 Martens, E.** *Canada's northern natives are helping others to help themselves*. Canada's Health and Welfare (Ottawa), 19(6), Jun 1964, 1-3, 8. Engl. See also entries 461, 462, 463 (volume 1), and 1167 (volume 2).

In 1964, the Canadian government initiated a project to train Eskimos as community health workers; the aim of the project was to provide native peoples with access to a health worker who would be able to advise them on sanitation, nutrition, and hygiene. Eight students from representative areas on the North were chosen on the basis of their leadership qualities. Training emphasized practical field work — the first half of the course took place in the home communities and the second, in formal classes. Initially, students researched the functions of other agencies in their area; they investigated the preventive health practices urged by the agencies and the people's attitudes toward them. With this background, the students were given formal training in educational methods and skills, including the use of film projectors and other visual aids. Basic bacteriology, the "germ theory" of disease, and the importance of nutrition and personal hygiene formed the core of study, and a first aid course completed their education. After completing the course, the health worker returned to his home and practiced under the supervision of the local nurse. (ES)

- 1773 Martens, E.** Canada, Department of National Health and Welfare. *Role of the health educator*. Ottawa, Department of National Health and Welfare, n.d. 2p. Engl. Unpublished document.

The author lists the objectives of health education programmes in Canada's Indian and Northern health services and outlines the role of the health educator. The objectives include encouraging the native peoples to participate more actively in the planning of their community health services, helping them to understand the nature of disease, and explaining the ways in which disease can be controlled or prevented. To help achieve these and related objectives, the health educator must (1) strengthen existing educational work carried out by other health workers; (2) coordinate educational activities of community agencies; (3) contribute to the training of auxiliary health aides; (4) develop teaching materials in response to specific local needs; and (5)

continuously evaluate all aspects of the programme. (MPM)

- 1774 Morrow, R.C.** *Training of health assistants.* Health Services Reports (Washington, D.C.), 88(7), Aug-Sep 1973, 588-590. Engl. 10 refs.

The purpose, goals, methods, and evaluation of health assistant training in Laredo, Texas (USA), are outlined. The purpose of training was to provide students with a good foundation for jobs in the health field; its goal was to prepare persons to liaise between professionals and ethnic communities — in this case, Mexican-American. The curriculum included some basic concepts in first aid, normal human growth and development, communicable disease prevention, obstetrics, mental health, elementary nutrition, chronic disease care, and drug abuse. Nonmedical subjects included mathematics, basic science, cultural heritage of the American Southwest, and remedial reading (where necessary). The course was made accessible to high school dropouts through qualifying training, and care was taken to ensure built-in advancement opportunity. Evaluation revealed that both the graduates of the course and their employers were enthusiastic about the programme, and it was concluded that "various levels of health paraprofessionals, if properly organized under professional supervision, can greatly enhance the efficiency of health care delivery." (HC)

- 1775 Nchinda, T.C.** *Traditional and Western medicine in Africa: collaboration or confrontation?* Tropical Doctor (London), 6(3), Jul 1976, 133-135. Engl. 8 refs.

Any health policy in Africa must recognize the part played by traditional practitioners. Traditional medicine is accessible, available, acceptable, and dependable — criteria that the modern health services sometimes do not fulfill. To ignore it is to overlook the importance of culture in a person's perception of illness. But collaboration with the traditional systems should involve studying drugs and techniques of the traditional health practitioners; including them in community research, development planning, and health education; and giving them the means to participate in the delivery of modern health care measures. (AC)

- 1776 New, P.K-M.** *Barefoot doctors and health care in the People's Republic of China.* Ekistics (Athens), 226, Sep 1974, 220-224. Engl.

The training and deployment of barefoot doctors in the People's Republic of China is examined with emphasis on the supporting factors that make it possible. These factors include shortening the requisite period of formal schooling; mixing factory or farm work with health training; emphasizing practice in health training; avoiding standardization of training and practice; emphasizing local self-sufficiency; integrating two medical traditions — Western and Chinese; and deemphasizing licensure. The organizational structure of the health services in one locality — the August 1 Commune in Shen Yang — is described. It is noted that part of the success of the barefoot doctors as primary care agents is

due to the support they receive from larger facilities and mobile teams of doctors, nurses, etc. The author muses about the significance of the Chinese experience for the United States and concludes that the absence of a tradition of community participation and the emphasis on professionalization in U.S. medicine would render such innovation impossible. (HC)

- 1777 Nicaragua, Ministry of Public Health.** *Medicina simplificada para areas rurales. (Simplified medicine for the rural areas).* Managua, Nicaragua, Ministry of Public Health, n.d. 5p. Span. Unpublished document.

A plan of simplified medicine is proposed for Nicaragua's rural area; its objectives are to extend basic health services to populations not served by existing facilities; to maximize available resources; and to encourage overall community development. The plan's vehicle is the *colaborador de salud comunitaria* whose functions will include organizing a health committee in his community, coordinating local programmes with those at the national and international levels, planning a health strategy to meet the community's health problems, maintaining an inventory of medical equipment, supplies, and drugs, etc. Basic qualifications of a candidate are the ability to read and write, age 18 or older (less than 50), demonstrated leadership capability, acceptability to the community, and good health. A physician or nurse in the nearest medical facility will guide and supervise the activities of the *colaborador*. (AC)

- 1778 Nyamosor, D.** *Training and employment of the secondary medical personnel in the Mongolian People's Republic.* Sante Publique (Bucharest), 17(4), 1974, 401-410. Engl.

A brief history of the health services in the Mongolian People's Republic prefaces this article on the training and role of secondary personnel. From 1930 to 1969 the average life span of the inhabitants doubled (32 to 64 years of age), and the infant mortality decreased markedly. These improvements were due largely to employment of secondary personnel including medical assistants, midwives, sanitary inspectors, laboratory assistants, technicians, pharmacists, nurses, and disinfectors. The training for secondary personnel is conducted in four medical schools; it is free to students, and they receive a monthly stipend of 200 tugriks. Each institute trains approximately 500-1 200 students annually, and courses vary from 2 to 4 years. During training, the students spend two-thirds of the time observing medical practices in clinics and often remain on duty during the evenings to gain experience. The state grants diplomas to those students who pass a final examination, and graduates either return to their villages to practice or stay at the medical school for further training. The system is structured in such a way that secondary medical personnel may advance to higher levels and eventually become physicians. (AC)

- 1779 Pakistan, Government Planning Commission.** *Plan for rural health system in the northern areas*

of Pakistan. Pakistan, Government Planning Commission, 1973. 15p. Engl.

The northern areas of Pakistan, with a population of about 3 million (1961 census), suffer from an acute shortage of health services and personnel. A rural health delivery plan was set out by the Planning Commission in 1973 to improve this situation. This plan provides for the training of community-oriented rural health workers in basic medical care and health education for the population. According to this plan male health workers will be trained in the diagnosis and treatment of prevalent diseases, and female health workers will learn the elements of midwifery and maternal and child care. Seven hundred and twenty teams consisting of one male and one female health worker are to be trained by eight teaching teams in a 6-week course of formal lectures, discussions, demonstrations, field trips, practice, etc. The annexes include a proposed timetable, budget, and training curriculum, as well as a list of medicines, instruments, appliances, and dressings for the health workers' use. The cost of training and outfitting these 1 440 health workers between December 1973 and October 1974, as well as that of evaluation of the programme, is estimated at 3 992 600 Rs. (HC)

1780 Pan American Health Organization, Washington, D.C. Medical auxiliaries. Washington, D.C., Pan American Health Organization, Scientific Publication No.278, 1973. 62p. Engl. Refs. Twelfth Meeting, PAHO Advisory Committee on Medical Research, Washington, D.C., 25 Jun 1973.

Individual papers have been abstracted separately under entries 1966 and 1973.

The purpose of this symposium was to give greater publicity to the different types of work that medical auxiliaries are effectively performing throughout the world and thereby to stimulate interest in the more widespread introduction of this category of health personnel. The first paper deals generally with such aspects as definitions and roles of auxiliary health workers, while the second briefly reviews their current use in more than 30 countries. These papers are followed by three detailed descriptions of contrasting uses of auxiliaries: to deliver primary medical care in rural areas of Guatemala, to provide dental care in Jamaica, and to control a specific disease (neonatal tetanus) in Haiti. The final paper outlines some of the auxiliary training programmes that exist in Latin America and the Caribbean. The concluding remarks of the symposium point to the lack of sufficient research on such factors as the optimum ratios of physicians to medical auxiliaries, cost-effectiveness of different types of medical personnel, the preferred institutional settings for medical auxiliaries, the changing role of the medical schools in developing countries, and the most suitable methods for training teachers and their students. (MPM)

1781 Papua New Guinea, Department of Public Health. Aid post orderly workshop. Konedobu, Papua New Guinea, Department of Public

Health, 1973. 79p. Engl.

Aid Post Orderly Workshop, Baiyer River, Papua New Guinea, 28 May-1 Jun 1973.

In 1973, the senior staff of the Papua New Guinea Department of Public Health held a workshop on the subject of the aid post orderly and invited church and other administrative authorities to attend. The report of this workshop contains a detailed aid post orderly job description, criteria for admission to training courses, the course syllabus, a section on training schools, and recommendations for career opportunities. This last item would allow senior aid post orderlies with 7-12 years experience to be admitted to other courses for auxiliary health workers, such as health inspector assistant. Sample forms for patients' records and lists of supplies for aid posts are included. (RD)

1782 Papua New Guinea, Department of Public Health. Diploma course in community health syllabus. Konedobu, Papua New Guinea, Department of Public Health, Oct 1971. 60p. Engl.

The 1-year diploma course in community health is offered to registered nurses and health extension officers with experience in the field of community health in Papua New Guinea. Graduates can expect to occupy one of the following positions: district supervisor of community health services, district health extension officer, tutor in a community health training centre, or officer-in-charge of a health centre. The syllabus is designed to prepare graduates for curative, educative, and administrative responsibilities. The 768 hours of the syllabus include lectures, field experience, discussion, and laboratory work. Subjects cover social and behavioural science, nutrition, preventive and curative medicine, public health, community health nursing, and principles of education. The objectives, content, related student activities, and expected outcome for each subject are discussed. Annexes include a case history outline and methods for student evaluation. (HC)

1783 Papua New Guinea, Department of Public Health. Medical and paramedical training in Papua New Guinea. Konedobu, Papua New Guinea, Department of Public Health, n.d. 1v. (various pagings). Engl.

Papua New Guinea has developed training programmes for a variety of medical and paramedical personnel (medical officer, dental officer, health extension officer, nurse, etc.). Over the years, curricula have been repeatedly reviewed to make them respond to the needs of the country. Much emphasis has been given to preventive medicine and health promotion so that health workers can undertake health education. Most of the basic, postbasic, and postgraduate courses for paramedical personnel could be applied in other developing countries in the South Pacific; overseas students are admitted into the various courses described. Entrance requirements, location, duration, and qualifications obtained upon completion of the courses are presented. (HC)

- 1784 Party Branch of Shen Mu County Health School, Shensi.** *Deepening the revolution in medical education.* Chinese Medical Journal (Peking), 2(2), Mar 1976, 87-92. Engl.

The Shen Mu county health school, established in 1959 to implement Maoist principles, trains barefoot doctors to work in rural areas. Training lasts 1 year and is open to students regardless of age, sex, or educational background. The courses comprise five units of study. These include traditional Chinese and Western medicine; preventive and curative care; herbal remedies, acupuncture, and Western drugs; diagnosis and treatment of the country's most common diseases; and some veterinary training. Formal classes are combined with practical work in the outpatient and family wards attached to the school and in mobile medical units. The stress on Maoist thought ensures that graduates not only return to the communes from which they came but also participate in the work of the people whom they treat. (ES)

- 1785 Peacock, J.B.** *Field exercise: an invaluable adjunct in the training of emergency medical technicians.* Military Medicine (Washington, D.C.), 141(9), Sep 1976, 622-624. Engl.

The U.S. Army and the State of Texas collaborated on the development of a training course in emergency medical care for ambulance, medical and helicopter-ambulance attendants. The result was 80 hours of classroom instruction and 40 hours of in-hospital training. Two field exercises were also designed to evaluate the students' ability to manage multiple casualties. In the first exercise, actors simulated injuries that might have been received in a motorcycle accident, a truck collision, or a fall from a mountain. Teams of four students diagnosed the problems and instituted emergency measures. They were evaluated for their accuracy, promptness, and team organization. The second exercise was a mock battle in which there were 25 casualties. These two exercises revealed that the students were not being adequately trained in the classroom to assess the scene of an accident or a disaster or to establish priorities for treatment. Consequently, it was decided to incorporate similar field exercises into the training programme. (RD)

- 1786 Pradhan, P.N.** *Scheme to utilize services of unqualified and qualified indigenous physicians practising in rural areas.* In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 89-90. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

An intensive 4-month training/refresher course for India's licenced and unlicenced indigenous practitioners would prepare them to staff the rural health subcentres. The course would be devised to refresh their knowledge of their own systems and to standardize treatment. They would receive training in modern first

aid for medical and maternity emergencies; study elementary facts about infectious diseases and their prevention, and become familiar with village sanitation and family planning. In addition, they would be taught to recognize the limits of their own system and to rid their practice of "quackery." The author points out that Ayurvedic medicines are easily obtainable and less expensive than allopathic (modern) medicines but that a standard formula for their preparation should be set down. (HC)

- 1787 Pradhan, P.N.** *Scheme of medical aid to rural areas — training the "doctors' orderlies" with an intensive course of nine months and their services in rural areas.* In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 87-88. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

A 9-month to 1-year training course for a new category of medical worker — the doctors' orderly — is proposed. This health worker would be recruited from among the large numbers of unemployed, partly educated young men, would be trained to provide first aid and treatment for common ailments, and would be placed in charge of one of India's rural health subcentres. The curriculum, which is set forth in detail, would consist, briefly, of the following: anatomy, physiology, and pathology of minor diseases; pharmacology of nonpoisonous drugs in common use; first aid; preventive medicine (including village sanitation and inoculation); and family planning promotion. The third term, or last 3 months of the course, would include practical demonstrations at the hospital. Some discussions on the importance of good communications — between the subcentre and the primary health centre, and between the primary health centre and the referral services — to the effective deployment of the doctors' orderly follows. (HC)

- 1788 Prince, J.S.** *Training of rural health workers in Ethiopia.* Ethiopian Medical Journal (Addis Ababa), 1(2), Oct 1962, 79-83. Engl.

In Ethiopia, the widespread health problems and shortage of health professionals prompted the creation in 1954 of the Haile Selassie I Public Health College and Training Centre. Since then the centre primarily has prepared three types of auxiliary health worker — health officers, community nurses, and sanitarians — although laboratory technicians also train there. The health officer training, which is open to high school graduates, comprises 3 years theory and 1 year internship. The community nurse course accepts students with at least a grade 8 education, and training lasts for 3 years, one of which is an internship. The course for sanitarians also requires successful completion of grade 8 but is composed of 1 year each of theoretical and

practical training. Curricula for the three courses have been outlined.

- 1789 Reid, R.A., Eberle, B.J., Gonzales, L., Quenk, N.L., Oseasohn, R.** *Rural medical care. An experimental delivery system.* American Journal of Public Health (New York), 65(3), Mar 1975, 266-271. Engl.

Since 1969, a family nurse practitioner has managed the only clinic in Estancia, New Mexico, and has served as the link between the rural community and the complex medical services at the University of New Mexico. The nurse and a laboratory assistant examine and treat patients, maintain medical records, and operate X-ray and laboratory facilities. Once a week, physician consultants from the university attend the clinic to treat referrals and to review medical records. The nurse may contact specialists directly at the university any time via telephone. During the first 2 years of operation, the clinic experienced a 20% annual increase in patient visits so that in 1971 350 patients were registered and the clinic staff managed 2 250 patient visits. (AC)

- 1790 Reid, S.E.** *Obstetrics for medical assistants.* Konedobu, Papua New Guinea, Department of Public Health, Feb 1969. 69p. Engl.

This textbook, intended for medical assistants in Papua New Guinea, covers care of women during pregnancy and childbirth. Included are chapters on anatomy and physiology; antenatal care; normal delivery and care of the newborn; complications of pregnancy and labour and their management. Important points within each chapter are numbered, and chapters devoted to care of the mother and child include every step to be taken, providing a checklist for practice. The appendices include a glossary of terms and a model obstetric history and examination form. All topics covered are illustrated by simple drawings. (HC)

- 1791 Rohde, J.E.** *Training of paramedical personnel. Understanding priorities in treatment of diarrhea.* Paediatrica Indonesiana (Jakarta), 14(9-10), Sep-Oct 1974, 153-158. Engl.

These guidelines on the management of diarrhea in children are intended to be of assistance in the training of paramedical workers. The importance of dehydration, its diagnosis, recognition, treatment, and prevention must be emphasized, and the author believes that the most effective way of getting these points across to students is to demonstrate the value of fluid replacement therapy on an actual patient. The formulation and administration of an oral glucose-electrolyte solution and the monitoring of the patient's response are described in detail. Most cases will respond rapidly to this form of treatment regardless of the underlying cause, but students should be instructed to watch for fever, a sign of systemic infection, in which case additional therapy with an appropriate antibacterial agent may be required. The student must also be made aware of the close association between malnutrition and diarrhea. With practical experience, the health worker will

become a strong proponent of this physiologic approach to the treatment of diarrhea. (MPM)

- 1792 Rosinski, E.F.** *WHO expert committee looks at training of medical assistants and other auxiliary personnel.* Annals of the New York Academy of Sciences (New York), 166(3), Dec 1969, 967-971. Engl.

See also entry 1747.

This paper briefly discusses the 13 recommendations and conclusions reached by a WHO expert committee studying the role and training of medical assistants. The committee concluded that there is a potential role for the cadre of medical assistant but emphasized that each country must thoroughly examine its health manpower needs before introducing such a health worker into the national health plan. Training programmes must also be fashioned to meet national needs and they should incorporate predetermined objectives, content, teaching methods, and criteria for measuring student performance. The committee cautioned against providing a "mini medical education," against using teaching staff whose primary function is medical education, and against upgrading medical assistants to physicians. Finally, it called for career incentives and refresher courses for medical assistants. (AC)

- 1793 Roubakine, A.N.** *Feldshers in the Soviet Union.* World Medical Journal (New York), 16(1), Jan-Feb 1969, 6-8. Engl.

Although the term *feldsher*, meaning a medical assistant, is of German origin, it has been used in the Soviet Union since Peter the Great's time when he started these auxiliaries on their careers. Because of the special geographical circumstances in the Soviet Union, feldshers have been of great value and are being trained in increasing numbers. Training of both general and specialist feldshers is open to anyone who has completed secondary education. The courses last 2 1/2 years (3 1/2 for those who have 8 years secondary education), and they comprise 4 354 hours of study, 20 weeks of practical work, 7 weeks examination sessions, 4 weeks state examinations, and 30 weeks holidays. The studies are divided into three cycles: general education; general medicine and Latin; and specialized medicine, surgery, etc. (this last encompasses 2 008 hours). Graduates work in consultation centres, medical posts, or hospitals; after 3 years experience they may substitute for physicians who are on leave but they may not practice independently (regulations established in June 1946). They may prescribe drugs, but their prescriptions must be signed by themselves and have an official stamp. Continuing education is encouraged, and many feldshers enter medical training after some years practice. (Modified journal abstract.)

- 1794 Sadler, Jr., A.M.** *Association of American Medical Colleges, Washington, D.C. New health practitioner in primary care.* Journal of Medical Education (Chicago), 49(9), Sep 1974, 845-848. Engl. 13 refs.

Eighty-fourth Annual Meeting of the Association of American Medical Colleges, Washington, D.C., 7 Nov 1973.

The new health practitioner is a generic name for nonphysician health personnel who are trained to carry out many of the primary medical functions and tasks that heretofore have been the sole province of the physician. The new health practitioner (NHP) includes the physician's assistant, physician's associate, nurse practitioner, health associate, medex, primex, and child health associate. In just 8 years, this field has moved from the founding of pilot programmes to the annual production of nearly 2 000 NHPs in more than 100 programmes. To enhance the development and future of new health practitioner training, academic health centres committed to primary care must assume the training of new health practitioners as a major priority; new health practitioners and primary care physicians must be trained together under the auspices of an academic health centre; and wherever possible, new health practitioner programmes should be developed that are open to men and women from a variety of backgrounds. (Author abstract.)

- 1795 Saldias, E.G.** *Paramedical education in rehabilitation in South America.* Archives of Physical Medicine and Rehabilitation (Chicago), 50, Dec 1969, 704-708. Engl.

A review of rehabilitation training in Argentina, Brazil, Chile, Colombia, Ecuador, Peru, Uruguay, and Venezuela indicated that in the late 1960s there were physical therapy courses available in all the countries. Courses in occupational and speech therapy, however, were fewer, and training duration varied. The curricula for physical therapy training were similar to those of courses in North America and Europe. A notable lack of training was apparent for paramedicals in orthodontics and prosthetics. (AC)

- 1796 Santiago, I.M.** *Paramedical training in Davao City.* Singapore, Quaker International Seminars in Southeast Asia, 1973. 8p. Engl.
Quaker International Conference on Southeast Asia, Building Health Through Community Participation and Paramedical Training, Davao City, Philippines, and Cilandak, Indonesia, 22 Jul-4 Aug 1973.

The medical cooperative and the paramedic training programme developed at the Bajada Clinic, Davao City, Philippines, illustrate how limited financial resources and personnel can be extended through the application of the principles of community self-help. The rules of the medical cooperative were drawn up in conjunction with community leaders, and the participants responded "eagerly and responsibly," keeping their dues (50 centavos per family per month) up-to-date and assisting in clinic operation. The paramedic training course has evolved, since its inception, from a curative orientation to a preventive one. The course is based on the application of the teaching principles of the well-known Brazilian educator, Paulo Freire (*Pedagogy of the Oppressed*). The student is perceived, not as

"an empty state," but rather as a human being with a valid accumulation of experiences behind him. The course is doubly enriched by input from both student and teacher in the form of "dialogue" and has been found particularly rewarding in the field of preventive medicine. Practical examples of this method in action are given. (HC)

- 1797 Scheffler, R.M., Stinson, O.D.** *Characteristics of physicians assistants: a focus on specialty.* Medical Care (Philadelphia), 12(12), Dec 1974, 1019-1030. Engl. 17 refs.

The Health Services Research Center at the University of North Carolina (USA) conducted a national survey of working physician's assistants in March and April of 1972. The sample of 151 physician's assistants obtained represents 55% of all graduates of 18 training programmes located throughout the United States. The data portray the demographic characteristics of the physician's assistant population, geographic distribution of these assistants, practice setting distribution, and the allocation of time to performing several categories of practice tasks. The focus of the study is differences among the physician's assistant specialties. General findings are that physician's assistants in the USA are primarily young white men with a background in health care services. Their numbers are greater in the South, and they typically care for patients under the direct or indirect supervision of a physician and engage peripherally in technical and supervisory tasks. (Modified author abstract.)

- 1798 Searle, C.** *No need for physicians' assistants in South Africa.* South African Journal of Nursing (Pretoria), 37(3), Mar 1970, 17-24. Engl. 16 refs.

In South Africa, an expanded role for the nurse could be the answer to physician shortages in rural areas. Nurses elsewhere have successfully undertaken all the tasks that have been suggested for a new cadre of health professional — the medical assistant — and yet efforts are under way to establish that cadre. Furthermore, nursing is a profession and its members must be licenced. This means that they must accept responsibility for their actions, whereas no mechanism exists for medical assistants to be held legally responsible for improper judgment. Finally, there are adequate numbers of registered nurses to meet needs if those who are not practicing at present can be persuaded to rejoin the labour force. (AC)

- 1799 Sen, P.C., Basu, R.N.** *Organisation of school health programme in rural health centre.* Indian Journal of Public Health (Calcutta), 3(2), Apr 1959, 229-231. Engl.

A blueprint for a school health programme organized through India's rural health units makes extensive use of the "hygiene-trained teacher." This teacher receives training in general science; first aid; sanitation (including the actual construction of latrines); disease transmission, recognition, and prevention; and nutrition. He is then expected to perform the following tasks under the guidance of a health worker: prepare the student

for routine medical examination by screening his vision, hearing, speech, height, weight, etc., and noting mental capacity; treat minor accidents and illnesses; conduct daily health inspections; maintain sanitary conditions in the classroom and school yard; organize physical training; give health instruction, both direct and indirect, in the classroom; and liaise between parents and health personnel. Both teacher and health worker will be supervised, though not continuously, by the leader of the health team, the medical officer. He will be responsible for the medical examination of the student and the treatment clinic. The need for cooperation between the health and education departments in the implementation of this programme is stressed in the conclusion. (HC)

- 1800 Sidel, V.W.** *Lessons from abroad: the feldsher in the USSR.* Annals of the New York Academy of Science (New York), 166(3), 31 Dec 1969, 957-966. Engl. 13 refs.

See also entry 1747.

The feldsher, a health professional who was introduced into the USSR around 1700, now has varied career opportunities in specialty or general medicine. Within those divisions his roles range from ambulance attendant to health maintenance personnel for industrial plants. Theoretically, all feldshers are under the direct supervision of a physician, but in the rural areas they may provide primary care for populations as large as 1 500. Training is either 2 1/2 or 3 1/2 years depending on whether the trainee completed 8 or 11 years of basic education. Students are selected from communities in which they will eventually serve, and their training is standardized throughout the USSR. At graduation, they complete standard oral examinations and are licensed to practice. Continued on-the-job training and refresher courses are offered, and many feldshers are encouraged to apply for admission to medical school. The pay of the feldsher is about 70-90% of that of the physician, but the difference in status is much greater. (AC)

- 1801 Smith, R.A.** Pan American Health Organization, Washington, D.C. *Medex: a new approach to the global health manpower problem.* Bulletin of the Pan American Health Organization, Washington, D.C., 7(3), 1973, 15-25. Engl. 15 refs.

The medex model, which was the result of comprehensive planning, has proved successful in the USA and in Micronesia. Previous experience with similar but unsuccessful programmes indicated that six elements were essential: collaboration with the medical profession, preparation of a community for the introduction of the medex, involvement of medical practitioners adjacent or within the community, task-oriented training, a rational system of deployment, and continuing professional training. The medex model incorporates these elements but represents only a skeleton whose flesh and bone are local needs and differences. The model is based on 3 months academic training and 9 months practice under the direct supervision of the physician who

will act as supervisor when the medex enters employment. Academic training emphasizes history taking and physical examination as well as basic treatment regimens. (AC)

- 1802 Spencer, H., Trudeau, M.J.** *Community health aide: catalyst and communicator.* Canadian Health Education Specialists Society (Ottawa), Technical Publications No.3, Jan 1969, 8-13. Engl. 8 refs.

In Canada and the USA, community health aides have proved effective in a variety of public health programmes designed to improve the health status of special population groups, e.g., Indian communities, migrant farm workers, etc. Part of their success is attributable to good selection, training, and supervision on the part of the professional; of these, selection is deemed the most crucial. Background and personality traits, such as warmth, ability to empathize, and enthusiasm should be the basis for selection. Personality traits to be avoided include inability to listen, self-righteousness, and excessive ambition. Recommendations regarding training and supervision include the following: that formal training be conducted 1/2 day at a time; that formal training be alternated with field work; that, following training, weekly education and planning sessions be conducted; and that, insofar as possible, the future supervisor be involved in both candidate selection and training. Throughout training, the importance of professional discretion and the aide's responsibility to provide feedback on the adequacy of the health service should be stressed. Some examples of the roles that aides have played in various services are included. (HC)

- 1803 Swift, C.R.** WHO, Geneva. *Types and roles of auxiliaries.* In Baasher, T.A., Carstairs, G.M., Giel, R., Hassler, F.R., eds. *Mental Health Services in Developing Countries*, Geneva, WHO Offset Publication No.22, 1975, 89-100. Engl. 10 refs.

See entry 1743 for complete proceedings.

The work of multipurpose auxiliaries includes the promotion of mental health, and this responsibility should be reflected in their training. They should be provided with the necessary educational background so that they may undertake mental health education and crises or stress intervention. They should be taught to identify individuals who are developing psychological problems, to refer those who require specialist treatment, and to supervise after-care of patients who have been hospitalized and released. Training programmes for mental health vary from country to country depending on the nature of medical and psychiatric services planned and the kind of work to be performed by the auxiliary. However, two general types of training can be suggested: in-service training in psychiatric institutions and structured study as part of a medical assistant or nursing auxiliary course. Retraining and refresher courses are essential, but supervision should be considered a form of continued training. Although no particular teaching method is suitable for all cases, student

participation, wherever possible, should be encouraged. Appended are outlines for courses in mental health; one is designed for medical auxiliaries and the other for nursing auxiliaries. (AC)

- 1804 Taylor, C.E.** *Health team concept at the primary health centre level and the staff pattern and their roles.* Indian Journal of Medical Education (Bombay), 11(2-3), Apr-Sep 1972, 86-92. Engl. 9 refs.

The roles of various members of the health centre in India should be reappraised and revised to encourage a team effort. One change in this direction would be to combine family planning, maternal child health, and nutrition services under one cadre of health worker. Another would be to define more clearly the functions of medical student, intern, and community medicine specialist who should all be working together closely in the health centre. Further, the health team concept could be expanded outside the centre by the introduction into the services of a new category of personnel, the family health worker (FHW). The FHW could be trained to undertake primary health care at the village subcentre level but to recognize and refer to health professionals all those cases that are beyond his capabilities to treat. Ultimately, however, a team concept of health care is dependent on the community physician and his ability to lead the team and to diagnose the health problems of a whole community. Such a role demands that medical education should be reoriented toward managerial skills. (AC)

- 1805 Technology Institute, Algiers.** *Sante: etude preliminaire. (Health: preliminary study).* Algiers, Technology Institute, n.d. 7p. Fren. Unpublished document.

The Algerian Institute of Technology has been defined as "an exceptional and provisional response" to the urgent need for large numbers of workers in the health sector; it aims to produce workers as quickly as possible by gearing coursework to the requirements of the job. This inquiry was undertaken to determine the kind and numbers of paramedical and auxiliary personnel needed to implement the Four-year Plan (1970-1973) — a plan that stresses the need for greater promotion of and community involvement in public health and preventive medicine. The training and function of the medical assistant, the public health midwife, the nurse, the sanitary inspector, the rural midwife, and the health aide are set forth; a new schedule of task distribution is proposed. The needs in terms of facilities and teaching personnel are then discussed. With a view to long-term perspectives, the cadres have been so structured that an individual can, with additional training, be promoted to a higher cadre; conversely, a dropout from medical school is given an opportunity to qualify as a medical assistant. (HC)

- 1806 Togo, Ministry of Public Health and Social Affairs.** *Morale professionnelle; cours de recyclage destines aux matrones et aux agents itinerants. (Professional ethics: refresher course for auxiliary*

midwives and itinerant health workers). Lome, Togo, Ministry of Public Health and Social Affairs, Mar 1969. 3p. Fren.

Unpublished document.

These notes from a refresher course for auxiliaries in the Republic of Togo explain, in simple language, professional ethics. They advise auxiliaries to remain calm when dealing with people, who because of their illness or condition, are "abnormally sensitive"; to develop an orderly, consistent method in carrying out their tasks; to develop their powers of observation so that they can identify and anticipate a patient's needs; and to exercise self-discipline by carrying out orders and adhering to rules in the absence of constant supervision. Particular emphasis is placed on behavioural aspects that tend to inspire a patient's confidence; initial reception of the patient; professional consciousness, as exhibited in a willingness to be "counted upon" and to attend conscientiously to each detail of the job; and professional discretion. (HC)

- 1807 Togo, Ministry of Public Health and Social Affairs.** *Role du personnel auxiliaire de sante publique. (Role of public health auxiliary personnel).* Lome, Togo, Ministry of Public Health and Social Affairs, n.d. 5p. Fren.

The elements — medical, educational, social, and administrative — of the role of the public health auxiliary, Togo, are briefly defined, and a detailed explanation of how to conduct a home visit — an activity incorporating all four of these elements — is set forth. The purpose of a home visit is to improve family health by bringing preventive/curative care into the home. Steps comprise finding out about the locality, problems peculiar to it, etc.; entering the home in a polite, tactful manner; performing the required preventive/curative tasks; observing and analyzing the family's health problems; maintaining records and vital statistics; and arranging follow-up. Instructions on how to use the public health kit — and particularly how to avoid contaminating it — are summarized in 10 steps. All explanations and instructions are expressed in simple language and addressed directly to the auxiliary health worker or midwife. (HC)

- 1808 Townsend, E.H.** *Paramedical personnel in pediatric practice.* Journal of Pediatrics (St. Louis), 68(6), Jun 1966, 855-859. Engl.

As the practice of pediatrics becomes more complicated and diversified, it is possible for pediatricians to delegate some duties to paramedical personnel working under them. An experiment (USA) is described in which the pediatrician employed a social worker and a visiting nurse to improve the quality of patient care in his private practice. The social worker's main responsibilities were (1) to interview the parent to elucidate the pediatric problem, (2) to assist in working out referral of the patient when necessary, and (3) to assist in supporting the family until referral could be completed. The visiting nurse was employed to visit all newborns and children with prolonged illness. Results showed

that the services performed by the paramedical personnel enabled the pediatrician to devote more time to those functions that he alone could perform. Parents seemed generally gratified that these services were available through the pediatrician's office: the personalized team approach seemed to assure them that paramedical personnel were available because of, rather than instead of, the pediatrician. The author concludes by suggesting that the functions of paramedical personnel who support the pediatrician in his practice should be reviewed to find a more efficient method of incorporating them into pediatric care. (HC)

- 1809 USA, Department of Agriculture. USA, Agency for International Development, Department of State. *Homemaking handbook: for village workers in many countries.*** Washington, D.C., U.S. Government Printing Office, 1971. 237p. Engl.

Intended for use by developing country personnel in home economics, community development, teaching, health education, etc., this handbook is divided into sections on how to begin, what to teach, and how to teach. The first section explains the importance of educating village women, details the methods for data collecting, summarizes agencies for support, and comments on the different support available from each agency. The second section, which constitutes the major portion of the handbook, comprises information on food and nutrition, individual agricultural endeavours, child care, health, home improvement and management, and clothing. Some of the concepts are illustrated by simple stories, and methods for building equipment are graphically represented. The final section discusses planning a village programme and teaching methods and aids. Conversion tables and a bibliography are appended, but there is no index. (AC)

- 1810 USA, Department of Health, Education, and Welfare. *Training the auxiliary health worker: an analysis of functions, training content, training costs, and facilities.*** Washington, D.C., U.S. Department of Health, Education, and Welfare, 1968. 38p. Engl. 16 refs.

Intended as a guideline for determining curricula and making budget estimates, this booklet sets forth the types of auxiliaries deployed in the United States and their training requirements. A description of the function of each cadre is followed by an overview of the content of his training, length of training, training costs, kinds of facilities and teaching staff needed, and estimated cost per trainee. Examples of the various types of auxiliary include the following: community health aide, social worker aide, food service supervisor, medical record clerk, nursing assistant, licenced practical nurse (advanced clinical and public health), operating room technician, dental assistant, and others. It is emphasized that the determination of specific performances and behavioural objectives is crucial to a successful training effort. (HC)

- 1811 Venezuela, Ministry of Health and Social Welfare. *Manual normativo para auxiliares de enfermería y otro personal voluntario. (Standard manual for auxiliary health workers and other voluntary personnel).*** Caracas, Ministry of Health and Social Welfare, 1971. 212p. Span.

The knowledge and skills required of the auxiliary health workers who staff Venezuela's rural dispensaries or health stations are set forth in this training manual. The procedures outlined are meant to be taught by practical demonstration rather than explanation; the manual contains all the theory deemed necessary in a course of simplified medicine. The eight chapters treat the following topics: health conditions in the rural environment; disease transmission and prevention; recognition, treatment, and prevention of acute and chronic conditions; recognition and treatment of anaemia, malnutrition, and goitre; first aid to accident victims (including victims of snakebite); care of the mother and child before, during, and after delivery, with a special section on educating the traditional birth attendant; keeping health records and birth, death, and vaccination certificates (sample forms included); and personal and environmental hygiene. Some procedures (applying bandages, setting fractures, transporting the accident victim, artificial respiration, etc.), are illustrated. (HC)

- 1812 Watson, E.J., Russell, R.C., Tokome, R., Dewar, A.L. *Report of visits to 37 Papuan medical college graduate and para-medical training college graduate extension officers.*** Madang, Papua New Guinea, Para-Medical Training College, n.d. 1v. (various pagings). Engl.

The staff of the Para-Medical Training College in Papua New Guinea visited 37 graduate health extension officers (HEOs) to determine how effectively they performed in the field. The investigators designed a job description and gathered information through personal interviews and observation. The data are tabulated according to duties in the job description, i.e., council meeting attendance, school and prison visiting, administration, contact and cooperation with other medical organizations, health and family planning education, patrols, aid post supervision, self-improvement, and clinical skills. On the whole, the authors conclude that, although the HEO's function is indispensable in the community, he desperately needs moral support to do his job effectively. The investigators discovered that certain problems, such as lack of transport for patrols, were aggravated by the paucity of vehicles and the low priority given to HEO work as compared to that of other personnel. However, the basic problem was found to be lack of motivation and initiative. Therefore, the authors recommend that a supervisor be appointed to conduct regular, lengthy visits; that HEOs be given longer postings; and that they receive more realistic salaries and medical supplies. Better communication is the primary feature. (ES)

- 1813 Weisz, F.H.** *Delegation of doctor's work to medical technicians.* Amsterdam, Royal Tropical Institute, 1968. 14p. Engl.

In Cameroon, two physicians practicing in a 500-bed hospital trained eight auxiliary nurses to undertake duties that are usually reserved for physicians. The training was based on supervised practice and was aimed at producing several single-purpose technicians. Two nurses were trained as surgical assistants, two as anaesthetists, two as obstetrical assistants, one as a consulting assistant to screen patients, and one as a fracture therapist. They all continued to function primarily as nurses, but each was able to perform the speciality as required. The job descriptions and training timetables for each of the technicians are detailed. The data collected over a 3-year period indicated that the technicians performed the duties as well as, or better than, the physicians. (AC)

- 1814 WHO, Geneva.** *Training and utilization of village health workers: a programme to improve the delivery of health services at the peripheral level.* Geneva, WHO, 1974. 324p. Engl.

Available also in French and Spanish.

In 1973, the World Health Assembly recommended that WHO formulate specific health programmes to be implemented by developing countries. As a result, a working group was formed who compiled this document for a system based on the village health worker. The qualifications and characteristics of this individual have been discussed in the document, and one chapter constitutes a practical guide for him. It contains subsections on communicable diseases, maternal care, child health, accidents, village and home sanitation, other common ailments, and community development; most of the concepts have been simply illustrated. Other chapters include information on costs, at the local level, of implementing a system based on the village health worker, the logistics of the system (supply of drugs, supervision, etc.), and the possibilities for adapting it to the national situation. Appended are a list of common health and community problems that a village health worker could tackle, a list of costs for supplies and equipment, a list of primary care techniques, and a glossary of terms. (AC)

- 1815 WHO, Geneva.** *Use of "medical assistants" for improving health services: suggested guidelines for planning, implementing, and evaluating a programme for the training and use of medical assistants.* Geneva, WHO, 1973. 11p. WHO/EDUC/73.164. Engl.

See also entry 1428.

Planning, implementing, and evaluating a programme for medical assistants should proceed step-by-step. First, epidemiological studies should be undertaken to determine the health problems that a medical assistant will treat. An individual, given responsibility for developing the medical assistant programme, should assemble information on training facilities, textbooks, student selection criteria, awards or diplomas, continuing education, career opportunities, and legal implications.

This information should be incorporated into the programme plan, and provision should be made for preparing members of the health team and community for the new cadre. After the plan has been properly formulated and accepted by the government, facilities and equipment should be procured, faculty recruited, students selected, etc. Although the facilities must be adequate, the most important element in implementation is the competence and quality of the teaching staff, and great care should be exercised in their selection. Evaluation of a programme should be ongoing and should include cost-benefit analyses, manpower analyses, etc. as well as evaluation of the medical assistants' performance and acceptance. (AC)

- 1816 WHO, New Delhi.** *Training of paramedical personnel in health centres. Conclusions and recommendations arising out of the technical discussions held during the twenty-second session of the regional committee for South-East Asia.* New Delhi, WHO, Oct 1969. 74p. WHO/SEA/Educ/6. Engl.

Twenty-second Session, Regional Committee for South-East Asia, Kathmandu, Sep-Oct 1969.

Some conclusions and recommendations on the training of paramedical personnel in health centres in South East Asia have been presented under four headings: (1) general health problems and priorities; (2) general principles of education and training; (3) categories of health personnel required and health personnel systems; and (4) training of selected health personnel in health centres. Identification of health priorities and objectives (e.g., adopting a comprehensive approach to disease control and strengthening the administration and management of health services at the intermediate level) is followed by a list of general recommendations aimed at improving the preparation of health staff; these recommendations refer to the motivation of the trainee, the role of the trainer, the objectives of the training programme, and the means for its implementation. Guidelines are provided concerning the selection, utilization, and supervision of different categories of health manpower required for a health system that will be appropriate to the needs of the people in South East Asia. The final section contains specific recommendations on the format of the training programmes for certain of these categories — nurses, sanitary workers, and auxiliary (or basic) health workers. Included as annex no. 2 of this report is "Training of Paramedical Personnel in Health Centres" (SEA/RC22/8), this being the main background document on which the present conclusions and recommendations have been based. (MPM)

- 1817 WHO, New Delhi.** *Evaluation of training programmes for auxiliary health personnel in the South East Asia region.* New Delhi, WHO, 20 Oct 1960. 16p. WHO/SEA/Educ/2. Engl.

The report lists the conclusions and recommendations arising out of a series of discussions in 1960 on the evaluation of training programmes for auxiliary health personnel in South East Asia. The first section is concerned

with "fundamental considerations" — it outlines the reasons for introducing auxiliaries and the need to define their tasks and responsibilities. Section two discusses categories of auxiliaries, including the respective merits of multipurpose and single-purpose workers. (An appendix to the report contains job descriptions for a medical assistant, assistant public health nurse, assistant midwife, assistant nurse, and assistant health inspector.) Various aspects of the training course are described in section three, such as entrance requirements, curriculum design, student accommodation, and refresher training. The preferred teaching format is referred to in section four, and the section following describes the preferred teaching personnel. The final section provides some pointers on the utilization of auxiliaries, including the duties of the supervisor and some ways to maintain the morale of the isolated workers. Although this report was published in 1960, the recommendations themselves are still generally applicable. (MPM)

1818 *Zeitung, Basel. Ifakara, konsequenter aufbau einer entwicklungshilfe. Ashante sana: manifestation Tansanianisch-Schweizerischer freundschaft bei der einweihung der medical assistant school in Ifakara. (Ifakara, the step-by-step development of aid. Ashante sana: the manifestation of Swiss-Tanzanian friendship at the opening of the medical assistant school in Ifakara). Zeitung (Basel), 9, 16 Jul 1973, 1; 14, 12 Nov 1973, 1-2. German.*

On 18 October, 1973, the medical assistant training centre in Ifakara officially opened. This centre is an extension of the rural aid centre set up 12 years before by the Bale chemical industries. For admission, students must have a years medical school background. The course lasts for 3 years and has a total capacity of 120 students. In 1978, the centre will be handed over completely to the Tanzanian government. (AC)

IV.2 Primary Nursing Care

IV.2.1 Professional

See also: 1407, 1472, 1681, 1713, 1720, 1723, 1728, 1738, 1739, 1746, 1770, 1778, 1783, 1816, 1845, 1908, 1923

1819 *Azurin, J. National health plan: its implications to nursing. Philippine Journal of Nursing (Manila), 44(2), Apr-Jun 1975, 121-124. Engl.*

This speech by the Undersecretary of Health for the Philippines refers to the responsibilities and prospects of nurses under the new national health plan. The plan focuses on the delivery of health services to medically deprived rural communities, and some of the ways in which nurses will be involved are briefly described. For

example, restructuring of the rural health unit means that nurses will have functions that have traditionally belonged to physicians alone, such as IUD insertions, staff supervision, and some laboratory examinations. But, while acknowledging the increased recognition being accorded the nurse, the author emphasizes the importance of the health team concept and stresses the need for all activities in the health field to be carefully coordinated. (MPM)

1820 *Cyprus, Ministry of Health. Curriculum for the three year professional nurses' course. Nicosia, Cyprus, School of Nursing, Nicosia General Hospital, 1970. 6p. Engl.*

Unpublished document.

The Nicosia General Hospital in Cyprus offers a professional nursing course that lasts for 3 years. Its objectives are "to assist in the development of the student as a professional nurse, mature individual, and respected member of the community"; to foster personalized, intelligent nursing care; to provide the basic elements for health teaching; to develop supervisory and administrative skills in students; and to support the integration of curative and preventive health services. Lectures total more than 700 hours in the 3-year course, and they incorporate the different nursing procedures required for medical, surgical, and pharmacological approaches to illness. A timetable for the course is appended. (AC)

1821 *Cyprus, Ministry of Health. Revision of syllabus for the certificate of mental nursing. Nicosia, Cyprus, Ministry of Health, n.d. 6p. Engl.*

Unpublished document.

The syllabus for the certificate of mental nursing (Cyprus) is divided into three sections — an introduction to the study of mind and body; principles and practice of psychiatric nursing (including first aid); and psychopathology, psychiatry, and psychiatric treatment. The first section includes an overview of human development and behaviour within the family and society; of psychological concepts; of human biology; of psychophysical disturbances and physical illness; and of human behaviour in relation to illness. The second section comprises the history and background of mental health services and nursing; techniques and principles of ward management; general nursing care; and psychiatric nursing care. The final section examines specific psychiatric problems, such as schizophrenia and paranoia, and includes a detailed review of the legal and administrative aspects of psychiatric care. Lectures are supplemented by educational visits to outpatient clinics, assessment training and rehabilitation centres, adult and juvenile court, psychiatric units, etc. (AC)

1822 *Cyprus, Ministry of Health. Nursing administration course: psychiatric. Nicosia, Cyprus, Ministry of Health, n.d. 3p. Engl.*

Unpublished document.

A 9-month course in nursing administration (psychiatric) is open to qualified registered mental health nurses in Cyprus. The course covers legislation governing mental health services; principles of hospital and ward

administration (catering, domestic services, etc.); personnel policies; changing patterns and roles in psychiatry; and general psychology. Students are required to prepare two research papers and, upon satisfactory completion of the course, to pass written and oral examinations. (AC)

- 1823 Djojosingito, W., Hammad, A.** *Community participation and teacher training for nurses and midwives*. Singapore, Quaker International Seminars in Southeast Asia, 1973. 11p. Engl.

Quaker International Conference on Southeast Asia, Building Health Through Community Participation and Paramedical Training, Davao City, Philippines, and Cilandak, Indonesia, 22 Jul-4 Aug 1973.

The major aim of community development in the health sector is to motivate people to accept responsibility for their own health so that they become actively involved in the planning of their health and social services. In this way, changes to traditional health practices will be brought about from within the community and will be more meaningful than a plan imposed from outside. The success of this approach is illustrated by the community-oriented teacher training programme in Cilandak (Indonesia) that prepares nurses for teaching posts in auxiliary nurse-midwife schools. The training course is extremely flexible to enable students to obtain their learning experiences inside the community as they help villages plan and organize their own preferred health services. The students gain practical experience in home visiting, identification of the influential village leader, determination of health needs, and alternative ways of introducing appropriate health services to meet those needs. Working together, the villagers and students have established village clinics that serve two purposes: they provide medical care and preventive services at the local level, and they also afford the students an opportunity for further learning. Other developments of the training programme have been the introduction of a health centre reference manual for the village clinics, revision of the curriculum by the students, and introduction of health volunteers from the community. (MPM)

- 1824 Fish, E.J.** *Nurses' aids series: surgical nursing*. London, Cox and Wyman, 1974. 384p. Engl. 11 refs.

The purpose of this textbook is to give the student nurse a sound understanding of the basic principles of surgical treatment and nursing, and their practical application to the patient during and after his stay in hospital. The material covered includes surgical treatment of various types of trauma; surgical treatment of conditions arising in the various parts of the body; pre- and postoperative care; various procedures such as anaesthesia, intravenous infusion; preparation of the patient for X-ray examinations; and the sources and control of infection in the hospital. Many descriptions of procedures are accompanied by line drawings or photographs. (HC)

- 1825 Logan, W.W.** *Nursing services in a gulf Sheikdom*. Nursing Mirror (London), 139(7), 16 Aug 1974, 61-65. Engl.

A British nurse who served in Abu Dhabi (United Arab Emirates) for a year as an assistant director of health recounts her experiences and outlines the basic health services. These comprise two hospitals, three clinics, a school health service, public health service, and three rural health posts. The prevalent health problems approximate those in other developing countries, but the discovery of oil has occasioned new investments in health and education. In 1961, there were 81 pupils in schools — all boys — and in 1972, 10 000 boys and girls were enrolled in schools. The author introduced systems for collecting health manpower statistics, grading the salaries of practicing health workers, and training more qualified nursing staff. She also helped design a manual for nursing procedures that used the available resources in Abu Dhabi and an in-service training programme for registered nurses. (AC)

- 1826 Mussallem, H.K.** *Glimpse of nursing in Cuba*. Canadian Nurse (Ottawa), 69, Sep 1973, 23-30. Engl.

A Canadian nurse examines the Cuban health services and, in particular, the education and role of the nurse therein. At present, nursing education follows 9 years of general education and lasts 3 1/2 years. This training is hospital-based, providing theory and clinical practice but limited experience in polyclinics and rural areas. Considerable emphasis is placed on the regular evaluation of students in both theory and practice. Following graduation, the nurse is sent to a special area of need — usually rural — for 2 years unless family circumstances preclude this. Postbasic education in the fields of sanitation, nutrition, epidemiology, obstetrics, pediatrics, health services administration, etc. is available at the National Teaching Unit. The author suggests, however, that the importance of the nurse's past role in the eradication of communicable disease and his future role in the control of the "diseases of the affluent" is not reflected in the numbers of practicing nurses — only 5 000 in 1971 in a country of 7 000 physicians — and that a review of the status, responsibilities, and remuneration of the nursing profession might make it more attractive to a young person. (HC)

- 1827 Niger, Ministry of Public Health.** *Manuel d'enseignement: techniques — soins*. (Teaching manual: treatment techniques). Niamey, Ministry of Public Health, May 1973. 131p. Fren.

This manual, which is an elementary, practical guidebook for nursing personnel in Niger, contains clear, illustrated instructions pertaining to day-to-day care of the bedridden; treatment of illness and trauma; care of the newborn; and pre- and postnatal care of the mother. Techniques include antisepsis, injection, transfusion, bandaging, catheterization, oxygen administration, medication distribution, urinalysis, etc. Each technique is defined, indications for it are described, and

the procedures for carrying it out are set down step-by-step. The manual presupposes supervision by a physician. (HC)

1828 Papua New Guinea, Department of Public Health. *Report on the conference on community health nurse training.* Konedobu, Papua New Guinea, Department of Public Health, 1973. 42p. Engl.

Conference on Community Health Nurse Training, Mt. Hagen, Papua New Guinea, 16-20 Jul 1973.

The improvement of training programmes for student nurses in the Papua New Guinea Highlands was the goal of the participants in the Mt. Hagen Conference on Community Health Nurse Training. The report on this conference includes a list of participants, the programme, a questionnaire that was distributed and a tabulation of the responses, and papers that were presented on such topics as community health nursing, the organization of a community health nursing course, and language problems of nursing students. (RD)

1829 Peat, M. *Establishment of physical therapy in developing countries.* Progress in Physical Therapy (Amsterdam), 1, 1970, 232-243. Engl.

Establishment of physical therapy training in a developing country will depend on the health problems in the country and the priority given to comprehensive care; sponsoring agencies will likely be government institutions, although voluntary agencies can contribute valuable financial and advisory assistance. Thorough planning must precede the introduction of physical therapy and should comprise considerations of facilities, curricula, faculty development (postgraduate training, etc.), and employment opportunities. Each component of a programme must be modeled to fit the health problems and resources of the country – e.g., facilities should be planned according to local building requirements, local humidity, temperature, and customs; curricula should include extensive training in prevention and rehabilitation of leprosy where this disease is prevalent; etc. In countries where physical therapy has already been introduced, faculty development has posed a serious problem, and perhaps cooperative regional training should be attempted. (AC)

1830 Van-Dromme, G. *Enseignement infirmier et para-médical au Maroc. (Nurse and paramedic training in Morocco).* Revue de l'Infirmière et de l'Assistante Sociale (Paris), Oct 1965, 640-642. Fren.

In response to gross shortages of health personnel in Morocco, following her independence in 1956, the Ministry of Public Health decided to step up the training of nurses (both male and female). The ministry drew up a programme calling for the creation of nursing schools offering diplomas at various levels, refresher and upgrading courses, and specialization. In order to facilitate the administration of the programme, the Central Service for Professional Training was placed within the Ministry of Public Health, thus

eliminating the need for intermediaries. It is directed by a doctor who is assisted by an administrator and technical advisors (nurses specializing in teaching). In each province, the central service is represented by a regional office, which ensures adequate liaison between the ministry and the schools and sees that ministerial directives are carried out. Results have so far proven satisfactory; the diploma has been made available to those whose effort merited it, while a standard comparable to that in the "most developed countries" has been maintained. Some details regarding nursing categories and admissions are included. (HC)

1831 WHO, Geneva. *Nurses: their education and their role in health programmes. Report of the technical discussions at the ninth World Health Assembly.* WHO Chronicle (Geneva), 10(7), 1956, 207-227. Engl.

Discussions at the ninth World Health Assembly identified five essential functions of nurses: caring for the sick and disabled in hospitals, homes, schools, and industries; serving as health teachers or counselors to patients and families; observing the physical and emotional environment of patients and relating observations to the entire health team; selecting, training, and giving guidance to auxiliary personnel; and, as members of the health team, analyzing health needs and planning services to meet the needs. The recruitment and education of nurses to perform these functions are problems facing many countries, and the assembly suggested more nurses could be attracted into the profession if influential members of society recognized the value of nursing; if families were made aware through visual aids, etc. of the opportunities for nurses; and if comfortable accommodation and stipends were provided for students. The administration and effective utilization of nursing services were also discussed. (AC)

IV.2.2 Nonprofessional

See also: 1407, 1419, 1642, 1713, 1739, 1744, 1746, 1755, 1770, 1771, 1774, 1783, 1788, 1805, 1827, 1855, 1903, 1940

1832 Cyprus, Ministry of Health. *Assistant nurse training (general): syllabus.* Nicosia, Cyprus, Ministry of Health, n.d. 6p. Engl.
Unpublished document.

The training of assistant nurses in Cyprus is primarily practical, although the 2-year programme includes 200 hours of classroom study. Lectures are divided into three general categories – principles and practice of nursing; the human being and his environment; and the causes, courses, and treatment of disease. Upon completion of training, students undertake both a written and a practical examination. (AC)

- 1833 Cyprus, Ministry of Health.** *Assistant nurse syllabus: psychiatric.* Nicosia, Cyprus, Ministry of Health, n.d. 4p. Engl.
Unpublished document.

The assistant nurse (psychiatry) course in Cyprus comprises three sections — an introduction to psychiatric nursing, an overview of the human and his environment, and the principles and practice of nursing. The first section includes information on the Mental Health Act; functions of the hospital, dispensary, and health personnel; the history and background of nursing; the structure and responsibilities of mental health services; mental health insurance; and first aid. The second section focuses on the behavioural aspects of adults and children and the basic elements and needs of the human body. The last section explores the general care of a psychiatric unit or ward; the general and specific care of patients; and use and abuse of drugs. The course provides students with educational visits to various psychiatric hospitals, etc. and in-service training for 2-3 months. (AC)

- 1834 Ennever, O., Marsh, M., Standard, K.L.** Pan American Health Organization, Washington, D.C. *Programa de adiestramiento de asistentes en salud de la comunidad.* (Community health aide training programme). *Education Medica y Salud* (Washington, D.C.), 3(4), 1969, 324-335. Span.

The Department of Social and Preventive Medicine, University of the West Indies (Jamaica), reports on a 4-month experimental training programme for community health aides drawn from a low to middle socioeconomic community. The overall aim was to give the aides a basic minimum training so that they could function as auxiliaries under supervision, relieving highly trained personnel to utilize their skills and training more effectively. The aides who were trained have worked during the past year in various positions, namely: in comprehensive health care programmes, in physiotherapy, as field workers in research projects, and in family planning. Evaluation of the programme indicates that these workers have performed satisfactorily and that a community health aide can be a very useful member of the health team in our developing communities. (Journal abstract.)

- 1835 Markham, J.** St. John Ambulance Association, London. St. Andrew's Ambulance Association, Glasgow. British Red Cross Society, London. *Nursing. 3 edition.* London, British Red Cross Society, 1969. 162p. Engl.

This training manual is the basis of two nursing courses offered by three voluntary aid societies in Britain. It has been divided into three parts. The first two parts correspond to the courses, and the third contains steps for specific operations. The first part covers general nursing principles including caring for a patient's skin, nails, hair, mouth, and eyes; bedmaking; taking the pulse and body temperature; maintaining records; giving medications; and caring for wounds and inflammations. The second part concentrates on care for special cases — the infectious patient, the unconscious patient,

the child, the mentally ill, the elderly, and the dying patient. The last section details procedures for taking blood pressure, catheterizing the patients, introducing and removing fluids in the stomach, injecting fluids, and administering oxygen. Appended are a table of infectious diseases found in Britain; a list of measurements and equivalents; a short explanation of bandaging; and a glossary of terms. An index is provided. (AC)

- 1836 Papua New Guinea, Department of Public Health.** *Nursing council for Papua and New Guinea: nursing aid syllabus.* Konedobu, Papua New Guinea, Department of Public Health, n.d. 17p. Engl.

The Nursing Council for Papua New Guinea has prepared a syllabus of its 1-year nursing aide course. Included is a minimum of 210 hours of instruction on such topics as: medical-surgical and psychiatric nursing; the aims, principles, and practices of nursing; man in society; personal and community health; elementary anatomy and physiology; hygiene and the transfer of disease; obstetrics; and child health. After each section there is a brief job description of what the nursing aide can be expected to do within each area. (RD)

- 1837 Takulia, H.S., de Sweemer, C., Sharma, K., Parker, R.L., Taylor, C.E.** *Preparing auxiliary nurse midwives (ANMs) for sub-centre work.* NI-HAE Bulletin (New Delhi), 3, 1970, 145-152. Engl.

An examination of auxiliary nurse-midwives (ANMs) — women who staff India's smallest primary health unit, the subcentre — revealed that they were not adequately trained to provide 8-10 villages with a variety of services — maternal and child health, first aid, family planning, etc. In addition, their preference for delivering babies was bringing them into conflict with the traditional birth attendants (dais). When an experimental project involving experienced ANMs in a more structured, supervised context and over a smaller area failed to remedy the situation, an in-service training programme for newly graduated ANMs was attempted. Although considerable "un-learning" had to take place — due to the inappropriateness of the ANMs previous training — a later on-the-job survey showed much better results, particularly in the realm of family planning. It is concluded that the system of ANM-staffed subcentres is feasible provided that the ANMs are sufficiently trained in the nonmaternity aspects of their work and are given adequate professional support. (HC)

IV.3 Primary Family Planning and Midwifery Care

IV.3.1 Professional

See also: 1600, 1606, 1739, 1746, 1751, 1778, 1805, 1859, 1875, 1955, 1960, 2080

- 1838 Anderson, B.G.** *Obstetrics for the nurse*. Albany, N.Y., Delmar Publishers, 1972. 176p. Engl.

Although this textbook is intended for use by nurses or nurse-midwives, the simplicity of expression within it would make it valuable for use by anyone who teaches, or provides, health care to women. The book is divided into four sections, the first of which includes chapters on the female reproductive system, conception, and the development of the embryo and the foetus. The other three sections comprise practical notes on managing prenatal care, parturition, and postpartum care; however, the procedures are oriented to hospital delivery. Each chapter is prefaced by a list of objectives and is concluded with lists of suggested activities and review questions. Appended is a sample clinical record, and an index is provided. (AC)

- 1839 Cummins, G.T.** International Planned Parenthood Federation, London. *Role of para-medical personnel (1)*. In Proceedings, Eighth International Conference on Planned Parenthood, Santiago, Chile, Apr 1967, London, International Planned Parenthood Federation, 1967, 199-203. Engl.
Eighth International Conference on Planned Parenthood, Santiago, Chile, Apr 1967.
See also entry 1849.

Nurse-midwives trained to perform gynaecological examinations and IUD insertions without direct supervision have become an accepted part of the health and family planning services in Barbados. Nurse-midwives were chosen for this role over midwives because they are familiar with the female reproductive physiology and are accustomed to assessing the health of the patient as a whole. To foster empathy between patient and paramedic, preference is given to young (25-35 years) married nurse-midwives with children of their own. During a 2-month training period, these women are exposed to gynaecological clinics; early pregnancies, both normal and abnormal; neoplasm before, during, and after treatment; and operating sessions of all sorts. They attend lectures and discussion groups and are well-versed in all the contraceptive methods. They are given specific instructions as to when not to insert an IUD. Upon graduation, they are given full recognition as specialists in the field in which they operate. The advantages of this type of paramedic are summed up as follows: a rapid increase in the potential rate of applying the IUD programme; increased contact with potential acceptors; removal of the bottleneck imposed by doctor shortages; and delivery of public health-type screening to gynaecological patients in the relevant age-groups. (HC)

- 1840 Cyprus, Ministry of Health.** *Midwifery syllabus*. Nicosia, Cyprus, Ministry of Health, n.d. 6p. Engl.
Unpublished document.

At the School of Nursing and Midwifery, Nicosia General Hospital (Cyprus), the training course for midwives constitutes 2 years practical training — 6 months

service in general wards, 15 months practice in the maternity department, and 3 months relatively unsupervised practice within the district. Students attend lectures regularly during the first 21 months of training, and the subjects include the structure of the reproductive system; basic anatomy of the foetus; and more than 30 topics related to normal and abnormal pregnancy, labour, and childbirth. Venereal diseases, vital statistics, and care of the newborn are also discussed. In the final 3 months of training, the student is required to provide prenatal care and delivery for three to five patients. A record of this care must be presented when the pupil completes the state examination for licensure. (AC)

- 1841 Cyprus, Ministry of Health.** *Community health visitor syllabus*. Nicosia, Cyprus, Ministry of Health, n.d. 4p. Engl.
Unpublished document.

In Cyprus, an assistant nurse may study to become a community health visitor; the course consists of 12 months training in midwifery and 9 months in the theory and practice of home visiting and of managing a maternal and child health clinic. The final portion of training includes lectures and 3 months practice in the district. Lectures range from maternity and infant welfare, personal, domestic, and communal hygiene, through school health, food and nutrition, to public health nursing, vital statistics, and current public health legislation. On completion of the course, the student is required to pass a written and oral examination. (AC)

- 1842 Derryberry, M., Moore, A.R.** *Education and training on the health aspects of family planning*. International Journal of Health Education (Geneva), 14(1), 1971, 2-22. Engl. 67 refs.

Throughout the world, family planning programmes have expanded rapidly in recent years. Yet this development has often been seriously hampered by a lack of adequately prepared professional and auxiliary staff. In this paper, the authors discuss this basic problem: they describe the strategy to be followed for developing an adequate education programme; bring out the need for a systematic analysis of the functions of the various categories of personnel before designing a curriculum to provide workers with the knowledge and skills they require; stress the importance of including in the course actual practice under supervision; and provide suggestions for evaluation of training. (Journal abstract.)

- 1843 Downstate Medical Center, State University of New York, Brooklyn.** *Nurse-midwife training program in family planning*. Brooklyn, N.Y., Downstate Medical Center, State University of New York, 1970. 14p. Engl.

A 12-week training programme at State University of New York prepares midwives to set up and manage family planning clinics. From its inception in 1966 until 1970, the programme graduated almost 80 trainees from more than 20 countries. The course is concerned with all aspects of family planning and provides experience in one-to-one patient education as well as mass

campaigns. The timetable comprises 147 hours didactic instruction and 216 hours of practice. Upon completion, the trainees receive a certificate from the university. The curriculum for the course is appended. (AC)

- 1844 International Planned Parenthood Federation, Kuala Lumpur.** *Physical check-ups in family planning.* Kuala Lumpur, International Planned Parenthood Federation, Southeast Asia and Oceania Region, May 1970. 13p. Engl.

Physical examinations and history taking are prerequisite to prescribing family planning methods; therefore, the basic elements of observing and understanding signs and symptoms are described in this handbook for family planning workers (doctors, nurses, and midwives) in the South East Asia and Oceania Region. Examinations described include postnatal checkup, pelvic examination, breast examination, cytological cancer screening (Papanicolaou smear), pregnancy test, and examinations for subfertility in males and females. Contraindications to contraceptive pills and the uterine device are discussed. Techniques and explanations to set women at ease and convince them of the importance of such examinations are included. (HC)

- 1845 Kamal, I.** *Role of the nurse and the midwife in MCH/family planning programme.* Pakistan Nursing Health Review (Karachi), 6(1), 1975, 6-15. Engl.

Nurses and midwives form the major portion of the professional health manpower in any country, and this paper is concerned with the important contributions that they can make to family planning and to maternal and child health in general. Seven broad areas are discussed: communication of information, motivation of the public, case finding and referral, clinical activities, supervision and education, administration and planning, and research and evaluation. The actual combination of duties and the extent to which they are successfully performed by the individual nurse or midwife will be determined by several factors, such as experience, national priorities, and the sociocultural environment in which she is to work. However, nursing leaders in developing countries are convinced that a lot more effort is required in planning and implementing sound educational programmes to prepare nurses and midwives for their varied tasks. (MPM)

- 1846 Kleinman, R.L.** International Planned Parenthood Federation, London. *Manuel medical. (Medical manual).* London, International Planned Parenthood Federation, 1971. 127p. Fren.

This manual, prepared for physicians and other medical professionals, sets forth recommended and not recommended methods of contraception. For example, the section on hormonal contraception includes the chemical composition of the various oral contraceptives available plus the reasons for prescribing one or the other. The various IUDs and their respective means of application are similarly described. Additional chapters treat setting up a family planning clinic, abortion, the

diagnosis and treatment of sterility, and the statistical evaluation of contraceptive effectiveness. Appendices include advice for patients on contraceptive use; where to obtain pelvic models for demonstration purposes; information and services offered by the IPPF; regional offices and member organizations of the IPPF; and a selected bibliography. (HC)

- 1847 Mikem, P.** *Role de la matrone du poste de sante. (Role of the midwife in a rural health post).* Lome, Togo, Ministry of Public Health and Social Affairs, 1967. 3p. Fren.
Unpublished document.

This document lists the various steps involved in each of the activities expected of the midwife staffing the rural health post in Togo. Preventive activities include prenatal and postnatal care, infant care, home visiting, hygiene and nutrition education, and vaccination. Curative activities include conducting normal deliveries and transferring abnormal or problem deliveries to more suitable facilities. Indications for transfer are briefly outlined. Administrative duties include maintaining registers for vital statistics, individual medical records, census records, diaries, monthly reports, etc. Simply written and in point form, the document constitutes a reminder of what to do, rather than a manual on how to do it, and in addition, constitutes a detailed job description of the cadre "midwife." (HC)

- 1848 Pan American Health Organization, Washington, D.C.** *Nursing and midwifery in health and population dynamics.* Washington, D.C., Pan American Health Organization, Scientific Publication No. PD/S1, Dec 1970. 150p. Engl.

Individual articles have been abstracted separately under entries 1789 and 1990.

This is a compilation of papers presented at two workshops on population dynamics and family health services. The aim of the workshops was to stimulate nurses and midwives to support programmes of maternal and child health and family planning. Participants in the workshops included leaders in the fields of nursing and midwifery from 23 countries and territories of America. Specialists in the areas of education, maternal and child health services, and family planning served as advisers in group discussions. Topics included sex education and family planning; population dynamics and family health services; implications for nursing and midwifery; and food, population, and health.

- 1849 Phillips-Gay, M.** International Planned Parenthood Federation, London. *Role of para-medical personnel (2).* In Proceedings, Eighth International Conference on Planned Parenthood, Santiago, Chile, April 1967, London, International Planned Parenthood Federation, 1967, 204-206. Engl.

Eighth International Conference on Planned Parenthood, Santiago, Chile, Apr 1967.

See also entry 1839.

A state-certified nurse-midwife-cum-family planning worker describes her training and present role in the Population Council Research Project in Barbados. Her duties include: performing internal pelvic examinations; taking Papanicolaou smears using an aspirator; inserting Lippes Loops; and completing cytology forms and admission, follow-up, and daily records. As a member of a mobile health services team, she has at her disposal the health centre facilities throughout the island, the support of the island doctors, a trained technical assistant, a trained interviewing and record keeping assistant, and a chauffeur. Her experience as a nurse-midwife has particularly prepared her for this role, and her knowledge of reproductive physiology easily enables her to distinguish between normal and abnormal cases, which she refers to a doctor. She feels, however, that her effectiveness could be increased by the following: greater publicity regarding the project, increased awareness of family planning methods on the part of the midwives, and the availability of a mobile unit for house-to-house canvassing of potential acceptors. (HC)

- 1850 Tesdell, M., Geijerstam, G.** University of Michigan, East Lansing. *Role of midwives in family planning programs*. East Lansing, University of Michigan, Center for Population Planning, School of Public Health, Mar 1968. 12p. Engl. 45 refs.

The literature on the role of midwives in family planning throughout the world is examined, country by country. The various categories of midwifery personnel (auxiliary midwife, traditional birth attendant, nurse-midwife, etc.) are defined, and the family planning training and responsibility allotted the midwife in each country are elaborated. The overall trend, as evinced by the growing family planning content in midwifery curricula, the courses and seminars on family planning set up for past graduates, and the family planning training being given traditional birth attendants, is to involve the midwife increasingly in family planning work. More studies are necessary, however, before the effectiveness of the midwife can be assessed. (HC)

- 1851 Viel, B.V.** *Midwife and family planning in Chile*. In *Midwife in the United States*, New York, Josiah Macy, Jr. Foundation, 1968, 105-109. Engl.

About 80% of the qualified midwives in Chile are employed by the National Health Service, and they represent the key to the present family planning programme. They are responsible for prenatal care, infant delivery, postpartum care, and family planning education. Since the midwives began promoting the use of intrauterine devices in 1964, 50 000 IUDs have been inserted. The high abortion rate, however, indicates that still more effort in family planning education is needed. In the future, there is a plan to establish training centres in rural areas so that the 3-year midwifery training can be undertaken there. It is hoped that a programme such as this will encourage rural women to remain in rural areas and provide services that are at present unavailable. (AC)

- 1852 Walia, B.N.** *Integration of child health with family planning*. *Journal of the Indian Medical Association* (Calcutta), 64(4), 16 Feb 1975, 85-87. Engl. 8 refs.

The author suggests some ways in which the disappointing family planning results obtained in India might be improved through closer integration of family planning activities with maternal and child health services. This concept is not new, and limited experience to date has confirmed that such a comprehensive approach can bring wide-ranging benefits, e.g., increased family planning acceptance, reduced incidence of malnutrition, and improved infant mortality. However, little has been achieved in this direction nationally, largely because the different levels of family planning worker have not received suitable training, especially in child health. The author, therefore, outlines a plan of action to rectify the situation. This calls for the appointment of a coordinator of child health activities in the Ministry of Family Planning; recruitment of a professor of pediatrics as an adviser; creation of training centres for MCH teachers; provision of an MCH certificate course for health centre doctors; and more appropriate training for the auxiliary nurse-midwives. (MPM)

- 1853 Whest-Allegre, P.** *Case for midwives and paramedics in Africa*. In Morehead, J.E., ed., *Paramedical Personnel in Family Planning - A Creative Partnership*, Boston, Mass., Pathfinder Fund, 1974, 15-21. Engl.

See also entry 1869.

A family planning service in Dakar, Senegal, introduced a training component in July 1971 and has since trained midwives and family planning auxiliaries throughout French-speaking West Africa. Training emphasizes the importance of a client's satisfaction and thus stresses individualized instruction and attention. Candidates for both courses must be over 25 and must demonstrate skills of communication. Both courses comprise anatomy and physiology of the reproductive system, endocrinology, techniques of contraception, demography, sociology, motivation, and administration, although the coverage is more detailed for the midwives. Practical training for the midwives constitutes abdominal palpation, pelvic and vaginal examination, breast and urine examination, blood pressure test, insertion and withdrawal of the different IUDs, and the use of foams, condoms, etc.; for the auxiliaries (field-workers), it is composed of house-to-house visiting, group visits, introduction and description of family planning and its methods, and patient counseling. Films, role playing, and models are used extensively in training and in family planning education for mothers. The syllabus for the midwives' course is included. (AC)

IV.3.2 Nonprofessional

See also: 1606, 1618, 1720, 1739, 1746, 1752, 1759, 1779, 1783, 1790, 1805, 1807, 1813, 1837, 1842, 1850,

1852, 1853, 1936, 1954, 1955, 1960, 1961, 1962, 1975, 2027, 2062, 2078, 2084, 2100

- 1854 Alam, A.S.** *Report on lady family planning visitors' training in West Pakistan.* In Proceedings of the Third Biannual Seminar on Research in Family Planning, Karachi, National Research Institute of Family Planning, 1967, 108-124. Engl. Third Biannual Seminar on Research in Family Planning, Dacca, 26-28 Mar 1967.

The lady family planning visitor (LFPV) cadre was created in West Pakistan in October 1966 to compensate for a deficiency in doctors working exclusively on family planning. Candidates were preferably married high-school graduates, who would undertake training at existing clinics and hospitals and at centres set up for the specific purpose. An important item for training was a textbook, that had been planned by an editorial board representing the agencies participating in the project and that had reached its second edition in 1967. Trainees were accommodated at centres as close as possible to their homes. In the first course, out of 93 trainees, 71 successfully completed the initial 4 months training and were sent to their own districts for an additional 8 months training in the field with women doctors. At the end of training, the LFPVs entered probationary practice for 1 year. The training programme was evaluated, as was the method of selection of the trainees, and it was concluded that the new cadre raised the hopes for ultimate success with the family planning programme in Pakistan. (DL)

- 1855 Arango de Bedoya, Y., Escallon Estupinan, C.** *Programa de investigacion en modelos de prestacion de servicios de salud: nueva metodologia para adiestramiento de comadronas, promotoras de salud y auxiliares de enfermeria. (Program of research on models for the delivery of health services: a new methodology for the training of midwives, health promoters, and nursing auxiliaries in a public health program).* Educacion Medica y Salud (Washington, D.C.), 9(4), 1975, 365-381. Span. 9 refs.

A programme of research on models for the delivery of health services (PRIMOPS) is being conducted jointly by the Cauca Valley University and the Colombian Ministry of Public Health through the Municipal Health Department of Cali, Colombia. Designed for the maternal and child health area, the programme is being carried out initially in a low-income district of Cali that has a population of 100 000. Health services are furnished under a regionalized system using a team consisting of a midwife, a health promoter, a nursing auxiliary, a nurse, and a physician. These workers provide care specifically related to mothers and children drawing on the resources of the home, the local health station, and the university hospital. Since the programme involves the testing of a new methodology of

health services delivery, which includes the use of non-professional personnel, community-organized information systems have been set up and tried on an experimental basis, as have methods for health services evaluation and personnel training. PRIMOPS' experience with its methods for training nonprofessional programme staff (nursing auxiliaries, health promoters, and midwives) is reviewed, and the results achieved by a team of nurses applying the training model to 9 nursing auxiliaries, 54 health promoters, and 33 midwives are described. (Modified journal abstract.)

- 1856 Bayoumi, A.** *Training and activity of village midwives in the Sudan.* Tropical Doctor (London), 6(3), Jul 1976, 118-123. Engl. Refs.

The history of midwifery in the Sudan is recounted from 1921 to the present. The Omdurman Midwifery School, which was opened in 1921 by a British nursing sister, was the first to offer Western techniques to traditional village birth attendants or their daughters. The course was 4 months and provided practical training in modern methods adapted to the Sudan. Training methods included repetition of basic concepts and demonstrations using a model. Since the students were mostly illiterate, they were taught to recognize different drugs by colour, taste, touch, and smell. Since 1949, 16 such schools have been established, and the training period has been extended to 9 months to include instruction in antenatal care, child welfare, home visiting, and general hygiene. Today's midwifery candidate is generally an intelligent, illiterate, young (18-25 years) rural woman, preferably married, divorced, or widowed. Upon graduation, she is issued a licence to practice domiciliary midwifery in her area and provided with free drugs and equipment. Although she is paid a nominal salary by the local government council, her main income comes from her clients, who pay according to their means. In addition to reducing the maternal mortality dramatically, trained midwives have been an asset to the development of a Sudanese health service, paving the way for medical and social changes. It is suggested that, in future, midwifery training be broadened to include all maternal and child health services. (HC)

- 1857 Bhandari, V., Bhandari, U.** *Indigenous dais: a study of 50 cases.* Family Planning News (New Delhi), 11(2), Feb 1970, 11-13. Engl.

Because the cooperation of the dai (traditional midwife in India) is vital to the success of family planning programmes, the author suggests that dais be compensated for the loss of income that would result from a reduced birthrate. In the past, dais have opposed family planning, and the results of a survey suggest that income loss was the underlying reason. The rural health training centre, Najafgarh, interviewed 50 dais in 33 villages and doublechecked the information with families who had used their services. Data are discussed in terms of dais' ages, numbers of living children, marital status, numbers of infant deliveries attended, attitudes toward massage and providing minor treatment for other medical emergencies, birth control methods they

are familiar with and likelihood of recommending them to interested women, average number of deliveries per month, and fees in cash and kind. (RD)

- 1858 Bowman, H.** Kenya, Ministry of Health. *Safari II: Sep 1967-Mar 1968. Family planning study days for medical/clinical assistants, health inspectors, enrolled nurses/midwives, assistant health inspectors, and assistant health visitors.* Boston, Pathfinder Fund, 1968. 44p. Engl.

The author summarizes experience from eight family planning workshops held in Kenya. Each workshop had two components — a 1-day session for medical assistants, clinical assistants, and health inspectors and a 1 1/2-day session for enrolled nurses, midwives, assistant health inspectors, and assistant health visitors. The budget, transportation, accommodation, and meals all presented some problems, and the author urges those who attempt similar endeavours to engage in detailed preplanning. Audiovisual aids, which included lupekits, printed materials, a birth control devices kit, and films, proved valuable; but the author cautions against using amateurs to run the projection equipment. Evaluation of the seminars was undertaken through pre- and posttesting; the results indicated improved knowledge about birth control, and most of the participants expressed a favourable impression of the workshops. Schedules for the sessions are included, and the use of group discussions is encouraged. (AC)

- 1859 Burusphat, L.** *Integrated family planning training and motivation programme of Thailand.* Bangkok, Development Support Communication Service, Dec 1975. 38p. DSCS/RB/11. Engl.
Conference on Family Planning Communication, Honolulu, Hawaii, 1-5 Dec 1975.

In 1970, Thailand's Ministry of Public Health was charged with the responsibility of a national family planning programme; the "family planning communication development and integrated campaign" was developed as part of the mandate. This project integrated family planning activities with health services; motivated acceptors in communities where adequate services had been introduced; decentralized training; and provided communication links between policymakers and the target population. The resources upon which the project drew were the facilities and personnel in existing health services: nurses, midwives, and sanitarians who had been posted in the villages of their origin and were trained as family planning motivators and providers. The training programmes, which had previously been operated totally by nine national level trainers, were reorganized so that 15 national level trainers worked with a task force of 500 regional trainers who, in turn, trained the more than 6 000 provincial personnel. Some of the most valuable teaching aids proved to be a glossary of family planning terms (local dialect); motivational kits; and mobile training units. These and others are expanded in appendices (I to VII). Schedules for the health personnel and evaluation procedures are also presented, and the tables and figures explain the planning process. (AC)

- 1860 Carne, S., Bailey, R.E.** St. John Ambulance Association, London. British Red Cross Society, London. *Maternal and child health manual.* London, British Red Cross Society, 1973. 131p. Engl.

The syllabus for a course in maternal and child health offered in Britain has as its theoretical base this manual, which begins with preparation for marriage and covers caring for the expectant mother, making preparations for the new baby, care of the newborn, infant feeding, and normal development up to 5 years. Sections on accidents in the home and communicable diseases are also included. The last section comprises two chapters: the first is an explanation of the spread and prevention of infection, and the second details incubation period, complications, nursing care and management of specific illnesses, such as herpes, mumps, whooping cough, diphtheria, tuberculosis, scarlet fever, otitis media, gastroenteritis, meningitis, and poliomyelitis. An index is provided. (AC)

- 1861 Central Family Planning Institute, New Delhi.** *Workshop on training of family planning personnel March 8 to March 12, 1966: report and recommendations.* New Delhi, Central Family Planning Institute, 1966. 87p. Engl.

This is a report of a workshop organized in New Delhi in March 1966 by the Central Family Planning Institute, India. The problems facing programmes in family planning were discussed, with emphasis on the selection and training of family planning personnel. The needs and scheduling of training were considered, as well as the possibility of involving nonmedical personnel because existing personnel were over-extended with work on disease control programmes. Separate sections report on the establishment of training centres and the role of central field units; and recommendations derived from the deliberations of study groups on the logistics of training and the organization of training centres are presented. (DL)

- 1862 Centre Calling, New Delhi.** *New job-responsibilities for media functionaries.* Centre Calling (New Delhi), 10(6), Jun 1975, 1, 15. Engl.

In 1975, India revised job descriptions for three members of its health team — the district mass education and information officer (DMEIO), the district extension educator (renamed deputy DMEIO), and the block extension educator. The objective of all these workers, which remains unchanged, has been to improve the mass education and coordination of efforts for family planning and health; the new functions for the DMEIO include supervising the deputy, guiding and planning activities at the district level, and devising the district communications strategy. The deputy DMEIO, besides serving as consultant for the block extension educator, will be responsible for liaison between district development departments, voluntary organizations, and other organized groups. The block extension educator will guide field-workers and supply them with materials and equipment. He will also be responsible for ongoing programmes at the local level. (AC)

- 1863 Chowdhury, S., Chowdhury, Z.** *Tubectomy by paraprofessional surgeons in rural Bangladesh.* Lancet (London), 2(7935), 27 Sep 1975, 567-569. Engl.

In Bangladesh, social as well as economic factors strongly favour the use of women over men, and of paraprofessionals over qualified physicians, for tubectomy surgery. Of 600 tubectomies carried out in three centres, 366 were performed by female paraprofessional workers with an average of only 2-months part-time training in tubectomy surgery. The rest were performed by qualified physicians. The infection rate in tubectomies done by paraprofessionals was 5.5%; in those performed by physicians it was 6.4%. This and other factors indicate that the performance of paraprofessionals was in no way inferior to that of physicians. (Revised author abstract.)

- 1864 Gray, N.** Planned Parenthood Federation of America, Inc., New York. *Summary of data received on recruitment, use, training of auxiliary personnel in planned parenthood programs.* New York, Planned Parenthood Federation of America, Inc., 1968. 5p. Engl.
Unpublished document.

The extent to which nonprofessionals from poverty areas in the USA have been employed in family planning services was the basis of this study. It was undertaken by the Planned Parenthood Federation of America and was based on a questionnaire sent to 58 of the federation's affiliate organizations. Forty-nine centres responded, and the results suggested that problems faced by such programmes are recruitment of personnel, turnover, motivation, and professional/nonprofessional relationships. Recommendations from the study concern establishment of training programmes for nonprofessional personnel so that career advancement can be made available to them. (AC)

- 1865 India, Institute of Rural Health and Family Planning.** *Functions of the district extension educator (family planning).* Gandhigram, India, Institute of Rural Health and Family Planning, n.d. 6p. Engl.

The author proposes a plan of study and action to help newly trained family planning district extension educators to orient themselves in their jobs. Because the district extension officer's main responsibilities are the training of local personnel and the coordination of local efforts to promote family planning, the incoming officer is advised to cooperate with as many people as possible and to familiarize himself immediately with the organizations and personnel in his practice area. Suggestions for programming routine work, making use of available resources, and developing a field demonstration unit are included. (RD)

- 1866 Islam, A.I.** *Lady family planning visitors for IUD work: creation of a cadre of paramedical staff in East Pakistan.* In Proceedings of the Second Biannual Seminar on Research in Family Planning, Karachi, National Research Institute

of Family Planning, 2, 1966, 42-45. Engl.

Second Biannual Seminar on Research in Family Planning, Karachi, 6-8 Oct 1966.

In 1966, a 1-year programme for lady family planning visitors (LFPVs) was launched in East Pakistan (Bangladesh), where the numbers of women doctors and lady health visitors (LHV) in rural areas were insufficient to cope with IUD insertions. The distribution of the trainees among districts and training centres is tabulated. Of 195 matriculated recruits, 17.4% dropped out of the training programme within 3 months, but only four of the remaining 161 trainees failed the final examination. Training was carried out at clinics offering IUD services, and the programme aroused widespread interest. (DL)

- 1867 Jafarey, S.A., Hardee, J.G., Satterthwaite, A.P.** *Use of medical-paramedical personnel and traditional midwives in the Pakistan family planning program.* Demography (Chicago), 5(2), 1968, 666-678. Engl. 22 refs.

In order to achieve its target of reducing the birthrate from 50 to 40 per thousand between 1965 and 1970, the Pakistan Family Planning Programme selected the intrauterine device as the cheapest, most effective contraceptive available. To combat shortages of female medical personnel available to perform insertions, lady health visitors — an existing cadre of health worker — and lady family planning visitors — a new single-purpose cadre — were trained to perform this procedure. The latter proved very effective at the village level, eventually performing 70-80% of all IUD insertions and have since been deemed worthy of additional training for general family welfare. Attempts to train traditional midwives (lady organizers) as family planning motivators and referrers of IUD clients met with less success, although further research on their performance is admittedly required. The training, job description, supervision, and performance assessment of each cadre is described in detail. Some assessment data are set forth in the form of tables. (HC)

- 1868 Manisoff, M., Davis, L.W., Kaminetzky, H.A., Payne, P.** *Family planning nurse practitioner: concepts and results of training.* American Journal of Public Health (New York), 66(1), Jan 1976, 62-64. Engl.

In view of the shortage of physicians and nurse-midwives to work in the field of family planning, a programme was introduced in 1972 at the New Jersey Medical School, USA, to train nurses as "family-planning nurse practitioners." This article describes the objectives of the programme, the format of the 12-week training course, and its effectiveness in preparing students for their subsequent duties. The programme aims to produce outpatient gynaecologic practitioners with special expertise in family planning who can accept increased decision-making responsibility. The authors report that for all of the 80 nurses who completed the

programme, employing agencies have been able to document specific improvements in the efficiency and effectiveness of their services directly related to the contributions of the family planning nurse practitioner. (MPM)

1869 Ostergard, D.R., Marshall, J.R. *Physician's assistants in reproductive oriented women's health care.* In Morehead, J.E., ed., *Paramedical Personnel in Family Planning - A Creative Partnership*, Boston, Mass., Pathfinder Fund, 1974, 23-35. Engl.

See also entry 1853.

Training for nonphysicians in women's health care is provided at Los Angeles County Harbor General Hospital, California; its objectives are to produce medical assistants who can supplement family planning, cancer screening, and prenatal services. Training requires from 12 to 24 weeks; depending on prior experience in the health field, the curriculum comprises didactic instruction, human relations experience, clinical experience, supervised patient care, and an internship. The didactic portion, which totals 78 hours, includes fundamentals of medical terminology, medical history, reproductive systems, endocrinology, and physical examinations; more detailed instruction is given in contraception, gynaecologic and nongynaecologic diseases, obstetrics, sexual development, and counseling techniques. Skills that trainees acquire during the course include thyroid palpation, cardiac auscultation, pulmonary auscultation, breast examination, abdominal palpation, pelvic examination, examination of the extremities, and specialized gynaecologic procedures; for prenatal patients they are able to determine uterine size, foetal position, foetal lie, foetal presentation, and foetal heart tone. Course graduates have proven competent and acceptable to patients. Data on IUD insertions are tabulated, and the course curriculum and timetable are included. (AC)

1870 Rice, D.T. *Family planning, maternal and child health, and nutrition guidelines for DEIDs planning.* *Journal of Tropical Paediatrics and Environmental Child Health* (Kampala), 21(1), Feb 1975, 38-52. Engl.

Guidelines for planning programmes in family planning, maternal child health, and nutrition programmes have been drawn up for use by DEIDS (Development and Evaluation of Integrated Delivery Systems) staff. The guidelines are based on principles of epidemiology, community involvement, integration, innovation, reliance on multipurpose and representative auxiliary health workers, provision of appropriate training and supervision, and low cost. Other characteristics are an emphasis on preventive services, widespread coverage, and evaluation. The system that is proposed comprises six modules or levels, the most basic of which is the community health worker. The top two modules — the regional health office and the national health ministry or department — have not been detailed but their existence and importance are recognized. At the community level, the system encourages volunteer labour;

however, sometimes a salary is required. The worker, who should be identified by the community itself, needs approximately 1-2 months training. Volunteer workers may serve only 500-1 000 persons, but full-time workers may be expected to manage as many as 3 000 people. The supervisors for the community level workers are multipurpose auxiliaries practicing in a nearby health post. They are expected to visit community health workers and to provide on-site training. Supervision of health post workers is provided by the staff at the nearest health centre, which should serve 5-10 health posts and cover a population of 50 000 to 100 000. Staffed by physicians and nurses, the health centres should have outpatient facilities and beds for emergency patients. Tables in the guidelines list the functions of community health workers and other auxiliaries. (AC)

1871 Saroso, J.S. WHO, Geneva. *Family health care in health services: planning, organization and management aspects.* Geneva, WHO, Nov 1973. 11 p. WHO/MCH/WP/73.7. Engl. 8 refs.

Unpublished document.

Surveys of health status in Indonesia indicate that morbidity and mortality are highest for persons who are under 5 or over 45 years of age and that lactating or pregnant women make up a large proportion of those who are ill and dying between the ages of 5 and 45. Because of such figures, maternal child health programmes in Indonesia have become a top priority, and one such programme is an MCH "package" that is planned for implementation around 1979. Other programmes have been incorporated into the second 5-year development plan (PELITA II), and one of these is a system by which community health nurses are trained to provide primary health services at the village level. A major criterion of all these health programmes is that they make maximum services available at low cost. (AC)

1872 Springer, E.C. *Servicio de partos a domicilio como practica para las auxiliares sanitarias en Panama. (Home midwifery services: a practice for auxiliary health workers in Panama).* *Boletin de la Oficina Sanitaria Panamericana* (Washington, D.C.), 39, 1955, 250-259. Span.

In 1954, the Department of Public Health of Panama organized a 3-month experiment to train auxiliary health workers for home midwifery services in the rural area of Chorrera. The experiment was prompted by the high numbers of unattended births (50% of all births in the area) and the resulting infant mortality (as high as 100 deaths per 1 000 live births); it included 100 hours of instruction in maternal and child hygiene, 430 hours of practice in hospital maternity wards, and 66 hours practice in pediatric wards. In-hospital training was complemented by participation in a home delivery service programme wherein trainees were allowed, under supervision, to assist one woman before, during, and after labour. The curriculum also included

practice in administering health education and registering the new mother and child in a health facility. Unfortunately, deployment of the auxiliaries was hampered by the lack of a supportive permanent home delivery service and supervisory personnel. The graduates began practicing in Chorrera's two rural health posts, which had maternity units, and plans were made for the establishment of a well-organized permanent home delivery service. (HC)

- 1873 State of Alaska, Department of Health and Welfare.** *Manual for Alaska's midwives.* Juneau, Alaska, Department of Health and Welfare, Division of Public Health, 1966. 65p. Engl.
See also entry 1936.

This simply written manual on the principles of midwifery was prepared for indigenous midwives in isolated areas of Alaska. All physiological descriptions, conditions, procedures, danger signals, etc., regarding pre- and postnatal care and delivery are clearly illustrated by line drawings. Instructions on what the midwife must not do and under what circumstances she must consult a nurse or doctor are included. The manual takes into consideration the type of facilities the midwife is likely to have at her disposal, and these are incorporated in the drawings. For example, the recommended heated bed for a premature baby is constructed out of locally available cardboard cartons and bottles, and the midwife is shown communicating with the nurse/doctor by radio. (HC)

- 1874 Surtojondro, S., ed(s).** *Role of the traditional midwife in the family planning program: report of national workshop to review researches into dukun activities related to MCH care and family planning.* Jakarta, Indonesia, Department of Health, 1972. 83p. Engl.

The purpose of this workshop was to determine whether the traditional birth attendant of Indonesia (dukun) could be more effectively used in the national family planning programme, and if so, how. The dukun holds a position of considerable importance in rural family life, attending 80-90% of all births, and participating in pre- and postnatal ceremonies and health care. In addition, dukuns are familiar with, and teach, traditional forms of birth control. Some dukuns have been trained in modern methods of birth control and have proved valuable in supplying potential acceptors with information and accompanying them to the clinic. Their success as motivators, however, depends upon the quality of guidance furnished by the midwife, the quality of service offered by the clinic, the presence of a woman doctor, and various social factors. A strategy for further utilization of dukuns in family planning work is outlined, recommendations for their effective utilization are drawn up, and areas where further research is needed are pointed out. (HC)

- 1875 Wortman, J.** *Training nonphysicians in family planning services and a directory of training programs.* Population Reports (Washington, D.C.), Series J(6), Sep 1975, J89-J108. Engl. 151 refs.

Family planning tasks range from simple to complex; they progress from distributing condoms, spermicides, and oral contraceptives, through administering injectable contraceptives, fitting diaphragms and caps, to inserting intrauterine devices, performing pregnancy terminations, and finally performing sterilizations. The amount of training required is geared to the complexity of the task; however, in at least a few countries nonphysicians have proved successful in performing every one. Effective training programmes for nonphysicians have common elements; they provide practical experience, an understanding of the function and side effects of the contraceptive methods, and an ability to convey to the acceptor the need for family planning, the value of the methods proposed, and the possible side effects. Examples of forms that have proved helpful for auxiliaries prescribing oral contraceptives or administering injections are included; a table delineates tasks taught to nonphysicians by differing agencies in Asia and the Pacific, Africa, Near East, Europe, Latin America, the Caribbean, and North America. Appended is a directory of selected national, regional, and international training agencies. It includes the language used for instruction, admission requirements or qualifications, duration of training, and cost for the trainee. (AC)

IV.4 Primary Dental Care

IV.4.1 Professional

See also: 1783

- 1876 Fox-Taylor, J.** *Dental school at Lagos.* British Dental Journal (London), 3 Aug 1971, 131-134. Engl.

Since its founding in 1964, the Department of Dental Surgery at the University of Lagos, Nigeria, has faced some setbacks because of political upheaval but has now increased its staff, enrollment, and array of training programmes. The department was founded as a joint effort of the Nigerian government and university officials in recognition of the need for dentists to deal with the increased prevalence of dental disease in the country. Although civil war seriously cut back the school's physical development, enrollment, and ability to attract staff from international agencies, active recruitment of secondary school students, the encouragement of other medical faculties, and the return of political stability have ensured the school's survival. The physical layout aims for effective use of limited building space, and equipment consists of standard, readily available models. The dental curriculum stresses oral hygiene and preventive dentistry so that graduates of the 5-year course are well prepared to deal with problems of oral abnormalities, tropical diseases, and deficiencies common in Africa. An 18-month course for

dental surgery assistants is also offered through the department. Future plans are to train personnel from other African countries with the support of international agencies and to involve more Nigerians in directing and operating the department. (ES)

1877 Papua New Guinea, Department of Public Health. *Report of the expert committee to review dental education and training in Papua New Guinea.* Konedobu, Papua New Guinea, Department of Public Health, Jun 1972. 41p. Engl. 36 refs.

Commissioned by the Minister of Health of Papua New Guinea, a committee of five senior dentists met from 4-19 April 1972 to study the state of dental education and training and to make recommendations for change. The needs and demands of the people for dental care were assessed by examining data gathered from epidemiological studies and records of dental caries, disease, loss of teeth, and malocclusion. Statistics on current dental health services and manpower and the present deployment of these resources provided a measure for future requirements. The committee examined the training programmes for dental manpower and their dispersal throughout the country. The recommendations highlight the need for increased preventive-restorative services with accompanying increased funding for more staff, transportation, equipment, and housing of dental facilities. Some specific suggestions include the centralization of dental services and their integration with other health care units and the involvement of industry in provision of dental care for their employees. Schoolchildren are the primary target, however, with their teachers receiving instruction in dental health education. Recommendations for the dental college focus on providing better and more uniform equipment in the college and in the field, integrating dental training with other medical resources, and increasing student enrollment. According to the committee, the training of dental officers, dental therapists, prosthetic therapists, and dental orderlies should be lengthened with stricter admission standards and division of services. The research and conclusions are supported by charts and tables. (ES)

1878 Pauly, R. *Children's oral problems in Costa Rica and programs leading to their solution.* Journal of the American Dental Association (Chicago), 79, Oct 1969, 889-895. Engl. 9 refs.

Children in Costa Rica suffer the same oral diseases as children elsewhere — the triad of caries, malocclusion, and gingival lesions, which leads to loss of teeth in adulthood. In the words of the author, "there are no new aspects of these dental problems . . . only a very high incidence of them." A comprehensive dental health programme, inspired by Denmark's system of school dental clinics, is proposed to extend regular dental care to the estimated 73% schoolchildren not now receiving it. The establishment of a pilot clinic, where professionals and auxiliaries will be given special training relevant to child dentistry (pedodontics) and where

where research studies will be undertaken, will be followed by the creation of school dental clinics. The advantages of such clinics in terms of educational possibilities, preventive programmes, saving in equipment and facilities, etc., are manifold. The steps for establishing such clinics are outlined, and some suggestions for financing them are put forward. (HC)

IV.4.2 Nonprofessional

See also: 1783, 1877, 1878

1879 Camrass, R. *Western Samoa: delivery of dental services in an emergent nation.* British Dental Journal (London), 135, 2 Oct 1973, 337-340. Engl.

Studies of dental epidemiology in Western Samoa indicate that periodontal disease constitutes a major public health challenge, being mainly responsible for the eventual loss of natural dentition. In 1971, a pilot project was established in four settlements to gauge the effectiveness of a village periodontal programme. A dental officer provided villagers with dental treatment (confined to scaling and curettage) and enlisted the cooperation of the local women's committees, already responsible for child health and village hygiene. Results showed a willingness of the population to undergo dental treatment when it was made available locally. Mobile health clinics were consequently set up and staffed by dental hygienists trained to perform basic dental services under the direction of a district dental officer. A dental health education programme is developing in primary schools to establish desirable behaviour patterns in children. Finally, a local in-service training programme has proved an inexpensive method of producing the personnel necessary to fulfill the dental needs of the population. (HC)

1880 Lopez Camara, V. *Adiestramiento de personal auxiliar de odontología en Mexico. (Education of auxiliary dental personnel in Mexico).* Salud Pública de Mexico (Mexico City), 7(3), May-Jun 1965, 463-468. Span.

A realization that proper training can prepare auxiliary dental personnel to perform many procedures in preventive dentistry prompted the school of public health in Mexico to introduce a 4-week course for auxiliary dental hygienists. The curriculum includes instruction in public health administration, oral health education, techniques of applying topical fluorides, rudimentary principles of microbiology, anatomy, and radiography, and the use of dental instruments. The total programme is divided into 75 hours of theory and 68 of practice. From 1961 to 1964 the school trained 131 students, and most of these (83.9%) were employed by the Secretary of Health and Social Assistance. An investigation of the graduates' activities indicated that they energetically introduced preventive programmes into

schools and undertook oral health education, at least partially alleviating the severe shortage of dental professionals. (AC)

- 1881 Sundram, C.J.** *Education of dental nurses in Malaya*. British Dental Surgery Assistant (Blackpool), Oct 1967, 46-52. Engl.

In Malaysia, where there are only 250 dentists serving a population of 7 million, the government has begun training dental nurses to provide tooth care for schoolchildren up to age 12. Training, which lasts for 40 months, is designed to give students skills in routine examination of teeth and gums; insertion of silver and copper amalgam fillings in permanent and deciduous teeth respectively; oral prophylaxis; dental health education; and extraction of septic deciduous teeth. The course is divided into three phases: preclinical instruction in the development of manual dexterity through the use of model teeth and dummy jaws (4 months); supervised clinical experience on actual schoolchildren (20 months); and field-work with a dental officer in the public health service (16 months). Much attention is given to management of the child in the dental chair and dental health education. Upon certification, the dental nurse is stationed in a school dental clinic, where, under "indirect supervision," he provides primary dental care to 500-600 children, referring them to the dental officer for fillings of the anterior teeth, extraction of permanent teeth, etc. (HC)

- 1882 WHO, Geneva.** *Expert committee on auxiliary dental personnel*. Geneva, WHO Technical Report Series No. 163, 1959. 32p. Engl.

The training and functions of auxiliary dental personnel are reviewed, and a recommended programme of auxiliary utilization for countries with little or no dental service is outlined. Three auxiliary cadres will be responsible for providing primary emergency dental treatment: the dental licentiate — the recipient of no less than 2 years training — will act as the normal dental practitioner; the dental auxiliary will be given an essentially practical training with a particular function in view; and the dental aide will be trained to extract teeth until such time as sufficient dental licentiates become available to perform this type of work. The dental aide's course will consist of 4-6 months formal training and 6 months field-work under direct and constant supervision. A suggested curriculum for each cadre is outlined. In planning such a programme, it is recommended that two facts be borne in mind: that the functions of the dental licentiate and the aide will change as the service evolves; and that additional auxiliary personnel will be added to the dental health team. (HC)

IV.5 Primary Laboratory Care

See also: 1728, 1770, 1783

- 1883 McMinn, A., Russell, G.J.** WHO, Geneva. *Training of medical laboratory technicians: a handbook for tutors*. Geneva, WHO Offset Publication No. 21, 1975. 83p. Engl.

Medical technologists perform tasks that are essential to medical care. Their training should combine theory and practice, and their tutors can apply instructional techniques and principles that have been tested in other fields. This manual explains how to prepare a lesson plan, how to recognize and handle problems, and how to examine students. A brief section covers audiovisual aids, and all the examples in the manual are specific to medical technology. Annexed are a list of the functions and responsibilities of various levels of laboratory personnel, the steps for planning a course, and a proposed training programme. (AC)

- 1884 Papua New Guinea, Department of Public Health.** *Medical technology in Papua New Guinea: syllabus*. Konedobu, Papua New Guinea, Department of Public Health, n.d. 1v.(various pagings). Engl.

This syllabus contains the 3-year curriculum of study necessary to become a registered medical technologist in Papua New Guinea. The courses are described in detail, and the procedures each student can be expected to carry out in the fields of biochemistry, histology, blood transfusion and serology, bacteriology, and haematology, after the completion of the course, are enumerated. (RD)

IV.6 Primary Environmental Health

See also: 1401, 1546, 1728, 1738, 1739, 1744, 1755, 1770, 1771, 1778, 1783, 1788, 1805, 1816, 1917, 1939, 1951

- 1885 Cyprus, Ministry of Health.** *School for health inspectors: medical department, syllabus of subjects, 1972-1973*. Nicosia, Cyprus, Ministry of Health, 1974. 6p. Engl.

Unpublished document.

After health inspectors in Cyprus have undertaken 2 years of lectures and demonstrations and 6 months practical work, they may write the public health inspectors examination. The first year's study comprises a basic course in anatomy and physiology; an introduction to water supply engineering and water treatment and purification; detailed instructions in food inspection; elementary chemistry; procedures for pest control; principles of air ventilation, building construction, and sanitation; and communicable disease control measures. The legal and social responsibilities and duties of a health inspector are constantly reviewed in the first year. The second year concentrates on sanitation and hygiene measures, but it also includes basic courses in

helminthology, bacteriology, protozoology, and geology. Both years include field-work and information on public health statistics. (AC)

1886 Drenckhahn, V. *Training sanitarians in the Pacific*. International Journal of Health Education (Geneva), 8(2), 1965, 95-99. Engl.

A 5-week training course for 21 sanitarians and community development workers in the Pacific Islands successfully upgraded trainees' knowledge about environmental sanitation and presented them with opportunities for practice in health education. Audio-visual aids, discussions, lectures, and field inspections were the teaching methods used in the course to focus on bacteria, personal hygiene, safe water, food handling, sewage and waste disposal, vector control, health education, and administrative procedures. The trainees selected as a class project, which extended throughout the course, the improvement of sanitary conditions of the student/teacher dining room. The project demonstrated what could be done with available resources and cooperation, for it initiated proper waste disposal, improved drainage, and better dishwashing procedures. Other projects included research into local problems and preparation of health education aids, such as talks and visual aids. The last week of the course was devoted to planning strategies for improving sanitary conditions in the trainees' home districts, which were presented to the entire group for further discussion. At the end of the course, staff and students evaluated the learning experience. (AC)

1887 Llinares, V.M. *Technical experts at the service of living and working conditions in the rural media*. Madrid, National Institute of Occupational Medicine and Safety, Sep 1975. 10p. Engl. 10 refs.

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

The responsibility for preventive as well as curative medicine in rural areas traditionally rests with the local doctor and his health unit, according to a survey of literature on the subject. However, experts in other sciences — such as metallurgy, chemistry, industry, and public works — must realize their responsibility toward the maintenance and improvement of public health. They should join with agronomists and foresters to form a health team to promote hygienic and sanitary conditions. An example of this approach can be taken from Spain, where engineering courses emphasize environmental responsibility. The result has been the eradication of malaria and many infectious, water-borne diseases. (ES)

1888 Papua New Guinea, Department of Public Health. *Environmental health and sanitation*. Konedobu, Papua New Guinea, Department of Public Health, 1972. 79p. Engl.

This simply written manual for auxiliary health workers in Papua New Guinea describes the main environmental factors influencing health and proposes methods of improving village sanitation. The provision of

safe drinking water, the proper elimination of wastes, and the principles of elementary nutrition are covered. Methods and materials for house building are presented, with special attention to low-cost housing, minimum standards, cleanliness, and comfort. Accident prevention around the home, pest control, and town planning are discussed. Illustrations are included to clarify detailed instructions, e.g., construction of incinerators, latrines, and drains, etc. (HC)

1889 Thompson, C.P. *Improving village health: a handbook for rural workers*. Madras, Christian Literature Society, 1965. 91p. Engl.

The basic requirements for good health — a knowledge of disease transmission, a safe water supply, adequate methods of human and animal waste disposal, sufficient nutritional intake, medical services — are discussed, and several ways of improving sanitary conditions in the village (in India) are suggested. The author observes, however, that most of these suggestions require some change in the behaviour of the villager, a change that he is usually unwilling to make. Before introducing an innovation, then, the village health worker must make sure that the innovation is perceived as an improvement over what it replaces; that it is acceptable to the people; and that it can be maintained without too much outside help. (HC)

1890 USA, Agency for International Development, Department of State. *Village technology handbook*. Washington, D.C., Agency for International Development, Department of State, 1970. 387p. Engl.

The two sanitary latrines or privies recommended for rural communities are the pit privy and water privy. Both are simple and inexpensive to install and operate, and neither contaminates the surface soil. Also, they can be easily adapted to basic requirements of a sanitation service, i.e., that groundwater entering springs or wells must not be contaminated; there should be no contamination of surface water; nightsoil should not be accessible to flies or animals; there should be little or no handling of fresh nightsoil; there should be no odours or unsightly conditions. Architectural drawings, which accompany this document, illustrate the construction of various sanitary latrines.

1891 WHO, Geneva. *Human investment in environmental sanitation programmes*. WHO Chronicle (Geneva), 30(1), Jan 1976, 26-27. Engl.

This article stresses that sanitation programmes in Africa must be motivated and implemented by individual communities — urban and rural alike. Although this concept of community action is not new in Africa, it has not been successfully directed toward solving sanitation problems. The reason is that the community has not been systematically made aware of the problems, which include contaminated water, inadequate waste disposal, and poor housing. Increased urbanization and industrialization have compounded many of these problems and there has not been a corresponding increase in resources available to solve them. Rather than

relying on foreign aid, African countries should emphasize self-help as the primary means of solving these problems, since community spirit has been effectively harnessed in the past in order to achieve certain public goals. Several African nations have already set up promotion groups within their own political and cultural framework to promote the socioeconomic development of their populations. (RD)

- 1892 WHO, Geneva.** *Training in malaria eradication.* WHO Chronicle (Geneva), 23(5), 1969, 233-236. Engl.

At both national and international levels, the World Health Organization participates in training personnel for malaria eradication programmes. It provides an advisory service for national programmes and contributes supplies and equipment directly to many. It has established international training centres for advanced training in malaria eradication and from 1957-1967 the centres held a total 79 courses and trained more than 1 400 participants. The organization held seminars in 1965, 1966, and 1968, and produced a standard curricula for courses in malaria eradication. Other projects undertaken by WHO include the preparation of teaching aids, which are regularly distributed to malaria eradication training centres. (AC)

- 1893 WHO, Geneva.** *Handbook on malaria training: report on a secretariat meeting on training in malaria eradication.* Geneva, WHO, Feb 1966. 1v.(various pagings). Engl.
See also entry 1952.

World Health Organization staff involved in malaria eradication (ME) training at international and national levels met in Geneva and drew up standard curricula for eight courses in ME. These comprised basic courses for personnel unfamiliar with the field (one for professional and one for technical staff), a refresher course for professional staff, a course on malaria epidemiology, and courses for senior laboratory technicians, national administrative officers, public health administrators, and subordinate staff. The group also examined present methods of teaching — lecture, integrated teaching, demonstration, group discussion, programmed instruction, use of audiovisual aids, and ways and advantages of incorporating them into training programmes. Proposals were made for changes in existing training programmes to increase their efficiency. These included establishing an advisory service of ME teaching staff for national programmes, utilizing teaching staff as advisers for WHO fellows, and setting up better student feedback mechanisms. The objectives for the courses are set forth and the curricula appended. (AC)

IV.7 Teaching Aids

IV.7.1 Rural Health Care

See also: 1401, 1472, 1483, 1679, 1696, 1697, 1807, 1814, 1820, 1821, 1827, 1833, 1885, 1888, 1893

- 1894 All Africa Leprosy Rehabilitation and Training Centre, Addis Ababa.** *Health education kit for teachers.* Addis Ababa, ALERT, 1974. 16p. Engl.
See also entries 1281 (volume 2), 1895, and 1930.

The objectives of this health education kit are to inform teachers in Ethiopia of modern views and treatment of leprosy, to provide them with examples for teaching schoolchildren, and to prepare them to recognize and advise leprosy patients. It emphasizes the need for early treatment of leprosy and explains that only lepromatous leprosy is infectious. Pictures illustrate the major points, and exercises are included to test the reader's comprehension. (AC)

- 1895 All Africa Leprosy Rehabilitation and Training Centre, Addis Ababa.** *Rural area supervisors course.* Addis Ababa, ALERT, n.d. 1v.(various pagings). Engl.
Unpublished document; see also entries 1281 (volume 2), 1894 and 1930.

The basic texts for the rural area supervisors course (leprosy) are the WHO *Guide to Leprosy Control* and ALERT's *Simple Guide to Leprosy*; this collection of lecture notes acts as a supplement to those texts. It comprises sections on basic science, clinical methods, leprosy, leprosy control, and rehabilitation. The first section discusses basic anatomy and physiology, and the second section covers the examination of patients, medical history taking, and taking and reading skin smears. The clinical features and treatment of leprosy are the focus of the third section, and the fourth section examines all aspects of leprosy control programmes. The last includes discussions on clinics, epidemiology, case finding, evaluation, clinical records, and the duties and training of health workers. Massage and hand exercises are covered in the section on rehabilitation. A glossary of terms is also included. (AC)

- 1896 Andreev, I.S.** USSR, Ministry of Health. *Za chistotu priusadebnogo uchastka. (Maintaining cleanliness on household grounds).* Moscow, Ministry of Health, Central Research Institute of Health Education, 1972. 8p. Russ.

Soil contamination by faeces, food scraps, and refuse allows the growth of the causes of acute intestinal disease — typhoid, dysentery, helminthic invasion, etc. In rural areas, these diseases can be avoided through proper waste disposal. Composting is a simple, reliable way of rendering garbage and manure harmless. Wastes are accumulated in a waterproof container with a tight-fitting lid (to discourage flies and rats); helminths and other vectors cannot survive the heat (50-60C) generated within the compost pile and are thus destroyed. Three types of latrines — cesspool, box, and bucket — are recommended, and the construction of each is illustrated. Cattle barns should be located at least 12-15 metres away from residences and 20 metres away from wells. Manure should be removed regularly from the barn to avoid contaminating the milk, and dead animals should be buried at least 500 metres away from houses, reservoirs, and pastures. However, when an animal dies of anthrax, tetanus, rabies, brucellosis,

or tularaemia, a veterinarian should supervise its disposal. (HC)

- 1897 Baker, F.J., Silverton, R.E., Luckcock, E.D.** *Introduction to medical laboratory technology. 4 edition.* London, Butterworths, 1966. 656p. Engl.

This textbook for medical laboratory technology was compiled from course notes; it purports to organize and distill information from various sources. It is divided into six sections comprising 42 chapters. The first section provides an introduction to laboratory equipment; the second, a review of chemistry, concentrating on investigations of urine, blood, faeces, gastric juice, and cerebrospinal fluid. The third section introduces the student to histology and presents information on fixation; decalcification; dehydration, impregnation, and embedding techniques; section cutting; staining and cytological procedures. Section IV concentrates on bacteriology: the use of culture media, methods for cultivating bacteria, antigen-antibody reactions, etc.; and section V covers haematology. The final section details blood transfusion techniques. Appended are conversion, logarithm, etc. tables; a glossary of terms and an index are provided. (AC)

- 1898 Balldin, B., Hart, R., Huenges, R., Versluys, Z.** *Child health: a manual for medical assistants and other rural health workers.* Nairobi, African Medical and Research Foundation, Rural Health Series 1, 1975. 1v.(various pagings). Engl.

See also entries 1637, 1906, 1918, and 1933.

Although this manual on child health was prepared specifically for medical assistants in Tanzania, any health worker in East Africa may find it useful, for children make up 50% of the population and the diseases they suffer are everyone's concern. Moreover, active prevention through antenatal care, immunization, and nutrition education can eliminate most of the common ailments. Consequently, this manual emphasizes prevention, but it also covers diagnosis and management of diseases of the respiratory tract, diarrheal diseases, and diseases of the liver, skin, blood, cardiovascular system, genitourinary tract, nervous system, etc. It has been written in simple language, and important rules or concepts are set off in boxes. Some other features include methods for providing health education, emergency measures for treating burns and poisoning, and instructions for keeping the "road to health chart." Appendices comprise a chart for normal values of weight, height, and head circumference; a list of pediatric drug dosages; and suggested menus for balanced nutrition. An index is provided. (AC)

- 1899 Biddulph, J.** Papua New Guinea, Department of Public Health. *Child health for health extension officers.* Konedobu, Papua New Guinea, Department of Public Health, 1969. 191p. Engl.

This handbook is intended to be used as a training and reference manual in the area of child health for health extension officers or medical assistants in Papua New Guinea. Although it emphasizes the care and treatment of diseases likely to be found in children, chapters on

preventive medicine, food and nutrition, maternal health, family planning, clinics and school health services, and health education are included. There are numerous illustrations, an index, and a table of drug doses for children. (RD)

- 1900 Bolivia, Ministry of Social Affairs and Public Health.** *El niño feliz de Bolivia. (Bolivia's happy child).* La Paz, Ministry of Social Affairs and Public Health, Resolucion Ministerial No.0981, n.d. 1v.(various pagings). Span.

A collection of visual aids that cover immunization schedules, child nutrition, and hygiene has been assembled by the maternal child health division of Bolivia's Ministry of Health. The aids include charts and handouts and are colourfully illustrated and are part of a major campaign to promote better child health. (AC)

- 1901 Boyce, E.** USA, Department of Health, Education, and Welfare. *Community health aide manual.* Anchorage, Alaska, Public Health Service, 1972. 1v.(various pagings). Engl.

The course for community health aides is part of a federal (USA) programme to improve health of the natives in Alaska. The objectives are to prepare the community health aide to act as primary care contact and health educator for a village. This manual, which is the basis for the course, covers elements of first aid, health promotion, antenatal and postnatal care, normal growth, sanitation, nutrition, dental and social services, and treatment of common ailments. It also contains sections on medical records maintenance, nursing procedures, pharmaceuticals, measurements, a glossary of terms, and an index. Medicolegal problems and religious care of patients are included. The manual is practice-oriented and simply written; the different sections have been marked by index tabs for easy reference. (AC)

- 1902 British Red Cross Society, London.** *Practical first aid. 5 edition.* London, E.P. Publishing, 1972. 94p. Engl.

See also entries 1903, 1904, 1905, and 1953.

First aid is emergency treatment to limit the effects of trauma, etc. until proper medical care can be given. This manual on first aid briefly explains the normal functions of the body and reviews many causes and symptoms of malfunction. Step-by-step treatment is outlined for the effects of trauma, such as brain injury, burns, fractures, wounds, snake bites, and insect stings. Shock, hysteria, epilepsy, and cramps are also discussed. Although certain instructions (such as sending for the ambulance immediately) are meant for developed societies, most of the information is generally applicable. Simple instructions are given for constructing stretchers and splints from various materials, and different knots, bandages, and slings are illustrated. Appended are the steps for the administration of heart compression and the syllabi for two levels of first aid worker. (AC)

- 1903 British Red Cross Society, London.** *Nursing: junior manual.* London, E.P. Publishing, 1971.

64p. Engl.

See also entries 1902, 1904, 1905, and 1953.

Although produced by the British Red Cross Society and geared to Western health services, much of this manual for nursing auxiliaries is universally applicable, as are the basic principles of caring for the sick and disabled. Written in a simple style, it details steps for moving, bathing, feeding, generally caring for, and clinically observing the bedridden or ambulatory patient. Elements of diet are also outlined, and some simple reminders for preparing food are set forth. Certain pages of the manual flagged "proficiency" are aimed at the second level nurse auxiliary. These are key sections and include procedures such as giving patients different forms of medication; treating inflammations; caring for wounds; bandaging; caring for patients with communicable diseases, sick or handicapped children, the elderly, and convalescing patients. A summary of infectious diseases is appended as are the syllabi for two levels of nursing auxiliary. (AC)

1904 British Red Cross Society, London. *ABC of first aid.* London, E.P. Publishing, 1968. 35p. Engl.

See also entries 1902, 1903, 1905, and 1953.

This brief, but comprehensive, manual provides step-by-step instructions for first aid. The instructions, numbered consecutively in order of priority, are simple and concise; they explain treatments for emergencies such as abdominal, chest, and eye injuries; childbirth and miscarriage; fractures, poisoning, nosebleed, heart attack, fainting, animal bites, insect stings, burns and scalds, wounds and blisters. The style of the book and type of emergency treatment recommended are exemplified in an entry about poisoning from agricultural insecticides commonly absorbed through the skin: "(1) remove the patient from the spray area, ... and make him rest; (2) remove all contaminated clothing (but avoid contaminating your own skin); (3) wash thoroughly exposed parts of the skin (including face, lips, and scalp) with soap and water; (4) get the patient to drink as much as possible; (5) watch his breathing carefully; it may stop suddenly; (6) if the patient's condition resembles heat exhaustion (described elsewhere in the manual), sponge him freely with cold water." The entries are arranged alphabetically, and a system for cross-references is utilized. Included are lists of first-aid materials that might be kept in a cabinet at home (or factory) or in a portable container. (AC)

1905 British Red Cross Society, London. *Junior health and hygiene manual. 4 edition.* London, British Red Cross Society, 1956. 65p. Engl.

Designed for British children, this manual gives basic, pragmatic advice about the following topics: health and hygiene, hygiene of the home, food and food values, the town or village, infection, prevention of injury and disease, immunity, camping hygiene, and the healthy mind. (RD)

1906 Essex, B.J. *Diagnostic pathways in clinical medicine: an epidemiological approach to clinical*

problems. Nairobi, African Medical and Research Foundation, Rural Health Series 2, 1975. 176p. Engl.

See also entries 1637, 1898, 1918, and 1933.

The aim of this book is to provide the student with the skills needed to make an accurate diagnosis in the out-patient clinic in less than 3 minutes. The diagnostic methods are devoted to diseases prevalent in East Africa, although they may be applicable elsewhere when adapted to other disease patterns. They represent a follow-up, not a replacement, for basic clinical training, and they have been tested for accuracy, usefulness, and economy. They are based on the steps in diagnosis: to identify the major symptom or sign, to narrow the disease possibilities to those that elicit the symptom, and then to choose the correct disease by a series of decisions based on the presence or absence of other signs and symptoms. Each decision is based on a logical progression through the possibilities; thus the paths for different decisions can be charted to their eventual conclusion, i.e., diagnostic flowcharts can be drawn up. In this book, more than 53 such flowcharts are assembled along with instructions on how to use them. (AC)

1907 Fargo, G., Izutsu, S., Tilton, F.H., ed(s). *Manual for health assistants in Micronesia.* Honolulu, Regional Medical Program of Hawaii, 31 Jan 1973. 1v.(various pagings). Engl.

This training and reference manual was devised to acquaint prospective auxiliary health personnel in Micronesia with the processes of appraisal and treatment of the majority of medical problems they are likely to encounter. The manual is divided into four sections. The first contains flowcharts on the action to be taken by the auxiliary with emphasis on the symptoms requiring professional attention. Section two includes procedures for history taking, physical examination, and treatment of common ailments. Section three covers various drugs, their uses, side effects, and dosages. Section four, prepared by the director of communications, explains how to use the out-island two-way radio systems. The manual provides the user with information about what to do and when, rather than how. (HC)

1908 Garrett, M. Lutheran School of Nursing, Madang. *Guide to the teacher of microbiology - enrolled nurse level.* Madang, Papua New Guinea, Lutheran School of Nursing, Oct 1973. 45p. Engl.

Unpublished document.

This teaching manual is designed to help the instructor organize a course on practical microbiology for nursing students in Papua New Guinea. The 40-hour course should present units on microorganisms and disease, infection hazards in the hospital and in the community, control of infection, and the collection of specimens. Each unit contains detailed recommendations concerning study and discussion topics, teaching methods, learning experiences outside the classroom, and expected terminal behaviour or information that the student can be expected to retain. A guide for the teacher,

a glossary of terms, and a bibliography of reference works are included. (RD)

- 1909 Holmes, A.C.** *Health education in developing countries*. London, Thomas Nelson, 1964. 190p. Engl.

Health education aims to make good health an asset valued by the community, to encourage the full use and development of health services, to teach people how to achieve good health, and to encourage them to achieve good health themselves; these objectives should be actively supported by all health workers. This means that every health worker should be a teacher and should follow five rules of teaching: begin with things that are known and work toward the unknown; proceed from the concrete to the abstract; proceed from the particular to the general; proceed from the simple to the more complicated; and proceed from the easy to the more difficult. The two basic methods of teaching are the didactic and the Socratic: the former is a one-way flow of knowledge and the latter, a two-way exchange. Most teachers combine the methods and rely on a simple equation: teach a little; test a little; coach a little; and do a little. Methods of testing and coaching include written assignments, group discussions, projects, and question and answer examinations. Aids to teaching encompass use of similarities and associations, living aids, radio, records, tapes, pictures, charts, films, exhibitions, light displays, and puppets. Construction and use of aids are presented, and roles in health education for different health workers are examined. Examples are taken from Kenya. (AC)

- 1910 Jopling, W.H.** *Handbook of leprosy*. London, William Heinemann Medical Books, 1971. 91p. Engl.

Designed for use by health workers in areas where leprosy is endemic, this handbook concisely and simply describes diagnosis, classification, treatment, and management of leprosy. Ziehl-Neelson and Tin Shwe methods of staining are explained, and it is emphasized that both dead and live *Mycobacterium leprae* retain the property of staining but live bacilli resemble solid rods and dead ones are fragmented or granular. The clinical manifestations of leprosy cover an entire spectrum of disability, and unfortunately leprosy lesions may be confused with other skin disorders. A combination of skin lesions and a neural disorder is strongly indicative of leprosy, and staining of smears should be undertaken for patients with these symptoms. Both tuberculoid and lepromatous leprosy may be accompanied by lesions; however only lepromatous leprosy is infectious. The differences between the two main types of leprosy as well as borderline leprosy are described. Management of the disease should proceed systematically, and records should be meticulously maintained. Depasone, thiourea compounds, and antibiotics are drugs that may be administered to patients with leprosy, and their effectiveness, toxicity, and dosage are discussed. A glossary of terms and an index are provided. (AC)

- 1911 Keister, M.E.** *Childcare: a handbook for village workers and leaders*. Rome, FAO, 1971. 58p. Engl.

Cleanliness, nutrition, immunization, and parental encouragement in play are the four major themes in this handbook on child care. They recur regularly throughout the 12 chapters and have been incorporated in suggestions for learning activities — for example, instructions are provided for constructing various toys. The handbook is intended for use by anyone teaching child care and offers ideas for teaching aids and follow-up. The introduction to the handbook comments that the content should be supplemented by a good knowledge of local foods and practices so that the general information can be adapted to different cultures, etc. The UN Declaration on the Rights of the Child is appended. (AC)

- 1912 Livingston, M.C., Stiver, M.P.** St. John Ambulance, Ottawa. *Patient care in the home: a textbook of home nursing*. Ottawa, St. John Ambulance, 1965. 169p. Engl.

Caring for a patient at home is the subject of this handbook for lay persons in Canada, and the book is geared to cultural and social patterns in Canada. It has been divided into three parts. The first section contains general information on nutrition, illness and accident prevention, control of infection, and special needs of elderly or chronically ill patients. The second section explains simple nursing procedures, e.g., bathing the patient, administering medicines, preparing simple dressings. This section also includes a chapter devoted to adapting home equipment to patient care; these procedures use newspapers and cardboard boxes primarily. The last section details emergency measures for disaster, gives advice on assisting at childbirth and covers, briefly, a plan for an emergency health service. (AC)

- 1913 Lumsden, L.P.** Papua New Guinea, Department of Public Health. *Mental health in Papua New Guinea: notes for field-workers*. Konedobu, Papua New Guinea, Department of Public Health, 22 Aug 1972. 37p. Engl.

This compilation of notes on mental health is intended to give the field worker in Papua New Guinea a better understanding of mental and emotional illness and hence greater ability to deal with individuals suffering from it. The topics covered include: the definition of mental health; the growth of love — what it is, how it is learned, and why it is sometimes not learned; the growth of thought and ideas (mental development); the growth of personality and personality problems; the hereditary, biological, psychological, and cultural causes of mental disturbances; symptoms of mental disturbances; dealing with the mentally ill and their families in the hospital and the home; and the prevention of mental illness. Twenty-one questions for thought and discussion are included. (HC)

- 1914** Macgrath, B., Leithead, C.S. *Clinical methods in tropical medicine*. London, Cassell, 1962. 545p. Engl.

This textbook was designed to aid students and practitioners in identifying the diseases they are likely to encounter in the tropics. Methods of history taking, physical examination, and laboratory investigation of a wide variety of "tropical" diseases are set forth; detailed instructions for the use of bacteriological and parasitological techniques in making a precise diagnosis are given. Special attention is paid to the significance of temperature charts in the diagnosis of unexplained fever. Many of the conditions, vectors, diagnostic procedures, etc., are illustrated by means of photographs or drawings. (HC)

- 1915** Macgrath, B.G., Gilles, H.M. *Adams and Macgrath: tropical medicine for nurses*. Oxford, Blackwell Scientific Publications, 1970. 326p. Engl.

Because of the shortage of doctors in the tropics, nurses (or other nonphysicians) must have at their disposal information for the diagnosis and treatment of endemic diseases. Recognizing this, the authors have compiled this simple handbook. It includes diseases that appear throughout the world such as amoebiasis, trachoma, and schistosomiasis as well as those, like blastomycosis, that are specific to a geographic area. The handbook defines the diseases and presents information on their geographical distribution, aetiology and pathology, clinical picture, diagnosis, and treatment. Some pictures and graphical illustrations are included. The appendices (1-5) set forth methods for the examination of blood, sputum, pus, urinary deposits, tissue fluids, faeces, and urine; present notes on the preparation of specimens for transmission to laboratories; include conversion tables and normal clinical values; and contain drug dosages for children and notes on vaccination. (AC)

- 1916** Malyarova, Z.V. USSR, Ministry of Health. *Voprosy okhrany zdorov'ya. (Questions of health protection)*. Moscow, Ministry of Health, Central Research Institute of Health Education, 1968. 84p. Russ.

Rural medical workers in the USSR are concerned with promoting health among the collective and state farm workers, and this handbook is designed for their use. It explains the organization of public health in rural areas and describes the work to be undertaken for health protection. It details measures to protect against occupational diseases and accidents. It also reviews the purpose and chemical structure of chemicals, such as pesticides, that farm workers are likely to handle, and explains methods for storing and transporting such chemicals to protect against poisoning. (AC)

- 1917** Mikhailova, S.E., ed(s). USSR, Ministry of Health. *V pomoshch' sanprosvetnitsy. (Aid for the health educationalist)*. Moscow, Ministry of Health, Central Research Institute of Health Education, 1968. 68p. Russ.

Health educators in the USSR must undertake health education for all members of society; to aid them in this task, several articles written by professors, etc. have been compiled in this booklet. The articles provide a brief history of public health; an overview of methods for teaching hygiene; and a cursory look at health education in some of the countries of Eastern Europe. There are specific suggestions for teaching hygiene to schoolchildren and examples of education programmes in industrial hygiene. (AC)

- 1918** Mtulia, I.A. *Pharmacology and therapeutics: a manual for medical assistants and other rural health workers*. Nairobi, African Medical and Research Foundation, Rural Health Series 5, 1976. 240p. Engl.

See also entries 1637, 1898, 1906 and 1933.

To apply drugs effectively in the treatment of diseases, health workers need an understanding of the actions of drugs on the living body. Recognizing this fact, the author has assembled information about the drugs commonly used in East Africa and has synthesized it for use by medical assistants and other rural health workers. He aims to acquaint them with the elementary science behind the drugs they are going to use throughout their professional life. There are 22 chapters, each dealing with a specific drug action. Within the major categories of drugs, the important and commonly used drugs are separated from the less important ones. Besides explaining the mode of action of different drugs, the book includes definitions, side effects, indications, preparations, and costs. Pediatric drug dosages are appended, and an index is provided. (AC)

- 1919** Mustard, R.A. St. John Ambulance, Ottawa. *Fundamentals of first aid*. Ottawa, St. John Ambulance, 1972. 119p. Engl.

This manual is concerned, primarily, with the basic principles of first aid and their direct, practical application by lay persons. It describes simple techniques that require neither special equipment nor professional supervision, but it does assume that professional medical help will always be available within a few hours. The first chapter outlines the structure and functions of the human body and relates these to the most common ailments that will be encountered. Subsequent chapters deal with specific topics such as wounds, fractures, artificial respiration, care of the unconscious, and transportation. The manual is written using simple terminology and contains several illustrations and checklists of instructions to assist the reader. (MPM)

- 1920** Norman-Taylor, W. *Textbook of hygiene for teachers in Africa*. London, Longman, 1971. 302p. Engl.

Teachers in African primary and secondary schools have a unique opportunity and responsibility to teach, supervise, and promote health; this textbook provides information to help them capitalize on their opportunity. It is divided into two parts: general health and school health. The first section presents basic material about the human body and emphasizes the importance

of understanding it. Two chapters, one devoted to reproduction and the other to mental health, attempt to cover facts objectively, but Western sociocultural mores are apparent throughout. The second section is a miniature manual on detection and treatment of illness, school-building construction, and maintenance, hygiene, first aid, sanitation, and teaching methods. Appended are suggestions for experiments in human physiology; a bibliography and index are included. (AC)

- 1921 Papua New Guinea, Department of Public Health.** *Programme for diploma in nursing education course 1973-74.* Konedobu, Papua New Guinea, Department of Public Health, Sep 1973. 89p. Engl.

The College of Allied Health Sciences, Port Moresby, Papua New Guinea, offers a 1-year course for registered nurses leading to a diploma in nursing education. This programme contains the admission requirements and a detailed description of the courses for 1973-1974, which, in addition to medically oriented subjects, included such topics as principles and practice of education, group dynamics and supervision modes, principles and practice of nursing education, introduction to management, nursing school administration, and growth and development of nursing as a profession. (RD)

- 1922 Papua New Guinea, Department of Public Health.** *Handbook of courses for combined diploma programmes in health sciences.* Konedobu, Papua New Guinea, Department of Public Health, 1973. 43p. Engl.

This handbook contains a list and description of the courses offered by the Papua New Guinea Para-Medical College leading to degrees in the following specializations: community health, health education, health services administration, medical technology, nursing administration, and nursing education. Information on aspects of the college such as registration, fees, entry requirements, admission, grading, etc., is included, and there are timetables laid out for each diploma. (RD)

- 1923 Papua New Guinea, Department of Public Health.** *General nursing: 2nd and 3rd year general nursing procedure.* Konedobu, Papua New Guinea, Department of Public Health, 1969. 62p. Engl.

The Lae School of Nursing, Papua New Guinea, has compiled this collection of nursing procedures for 2nd- and 3rd-year students. Included are a number of diagnostic tests, a short section on emergency and disaster nursing, and detailed descriptions of pre- and post-operative treatment of patients who have undergone some of the following procedures: blood transfusion, bone marrow biopsy, bladder irrigation, chest aspiration, cardiac massage, lumbar puncture, peritoneal dialysis, and tracheostomy. (RD)

- 1924 Para-Medical Training College, Madang.** *Para-Medical Training College, Madang, syllabus for the health extension officer training course.*

Madang, Papua New Guinea, Para-Medical Training College, 1969. 35p. Engl.
Unpublished document.

The training of health extension officers at the Para-Medical College, Madang, Papua New Guinea, consists of a 3-year course combining both practice and theory. A 10-week preliminary term prepares the trainees for work in the hospital and for their role as health extension officers while weeding out those unsuitable for the task. The 1st years work combines extensive study in basic medicine, nursing procedures and care, clinical medicine, public health, health education, and administration with practical work in Madang General Hospital and field work in the surrounding villages. The 2nd year involves practical application of these theories in Kainantu and the Eastern Highlands; the 3rd year combines both theory and practice at a more advanced level. Short synopses of courses include reference works, practical work, and some discussion of problems to be expected in dealing with trainees. (ES)

- 1925 Reid, S.E., Johnson, D.G.** University of Papua New Guinea, Port Moresby. *Obstetrics for health extension officers.* Port Moresby, University of Papua New Guinea, 1972. 154p. Engl.

This manual provides the health extension officer in Papua New Guinea with information on the provision of obstetric care. It comprises chapters on anatomy, antenatal care, normal and abnormal childbirth, and complications of pregnancy, labour, and puerperium. It is designed to anticipate the problems that the health extension officer may face as the sole medical worker practicing in a rural area. Likely symptoms and suggested treatments are simply explained with clear line drawings. A glossary lists relevant medical terms; the index is comprehensive and convenient. Stress is placed on the necessity for prenatal care, the referral of difficult cases, and the health education of the villagers. (ES)

- 1926 Ross Institute, London.** *Small water supplies.* London, London School of Hygiene and Tropical Medicine, Ross Institute Bulletin No.10, 1971. 60p. Engl.

See also entries 1927, 1928, and 1929.

Supplying safe water to rural populations is the subject of this handbook for health personnel; it contains methods for sanitary collection of rainwater, surface water (lakes, streams, rivers, etc.), and groundwater (shallow, deep, and artesian wells). The basic requirements of a water supply are that it be safe and wholesome, readily available, and adequate. One standpipe should not serve more than 40 people; and one well should be constructed for every 250 people. Natural purification of water is to be preferred, but where pure water is not available, techniques, such as sedimentation, aeration, filtration, or disinfection, should be undertaken. All these purification methods are described for individual and public water supplies, and blueprints for wells are included. Chemical and biological standards of water have been suggested by the World Health Organization and these are appended, as are

methods for collecting water samples for examination. (AC)

- 1927 Ross Institute, London. Protein-calorie malnutrition in children.** London, London School of Hygiene and Tropical Medicine, Ross Institute Bulletin No. 12, 1970. 20p. Engl.

See also entries 1926, 1928, and 1929.

Protein-calorie malnutrition (PCM), which takes the form of marasmus and kwashiorkor, is prevalent in developing countries, and health personnel should be aware of methods for its prevention, its diagnosis, and its treatment. PCM results when a child does not consume the proper foods to meet his nutritional requirements. If both protein and calories are deficient, the child develops marasmus; and if only protein is deficient, kwashiorkor results. Preventive measures at the national level include supplying better seeds, fertilizers, and information about improved farming techniques; at the local level, they include supporting nutrition and health education, improving preventive health services, and distributing protein-rich food supplements. Treatment of PCM aims to supply what has been lacking in the diet, to prevent and treat infections and other diseases, and to teach parents how to prevent a relapse. In severe cases, treatment requires a protein-rich diet to supply at least 4 g protein/kg body weight every day. Cases of kwashiorkor require 100 cal/kg body weight, and marasmus patients need 200 cal/kg a day. Suitable diets in and out of hospital are appended as are recipes for simple- to-prepare supplements. (AC)

- 1928 Ross Institute, London. Housefly and its control.** London, London School of Hygiene and Tropical Medicine, Ross Institute Bulletin No. 5, 1970. 25p. Engl.

See also entries 1926, 1927, and 1929.

The housefly is a threat to health throughout the world, and mobilizing personnel to control it is the aim of this booklet. Germs may be carried on flies' feet or bodies or may be spread through their frequent defecation or vomiting. They breed best in decaying food and excrement and they reproduce rapidly: estimates of total survivors of a single pair, for a full season, vary from 5 billion to 190 million billion. The most efficient way of banishing them is to eliminate their potential breeding places; therefore, sanitary methods for the disposal of human and animal excreta and garbage are essential. If breeding does occur in waste disposal areas, it can be checked by spraying crude oil on the waste or dusting it with borax. Preventing their contact with food, using instantaneous knock-down insecticides, and periodically applying residual insecticides to fly resting places are curative measures but cannot substitute for adequate sanitation. (AC)

- 1929 Ross Institute, London. Rural sanitation in the tropics.** London, London School of Hygiene and Tropical Medicine, Ross Institute Bulletin No. 8, 1968. 46p. Engl.

See also entries 1926, 1927, and 1928.

Blueprints for building family and public privies have been assembled in this handbook on rural sanitation; waterborne, aqua, and pit latrines are detailed, and methods for waste disposal and stabilization are set forth. The waterborne latrine includes pour-flush and cistern-flush types, both of which can be built into a dwelling. Aqua and pit privies, however, must be separated from a family's dwelling for health purposes and must incorporate adequate ventilation. The aqua privy utilizes an outlet into a soakage trench or seepage pit for sewage disposal, whereas the pit latrine relies on bacteria within it to render the contents harmless. Aqua and cistern-flush privies have proved most successful for communal use, but even these require continued maintenance by assigned sanitation personnel. The problems with public latrines are numerous, and efforts should be made to encourage individual households to build separate facilities. (AC)

- 1930 Ross, W.F., ed(s). All Africa Leprosy Rehabilitation and Training Centre, Addis Ababa. Simple guide to leprosy.** Addis Ababa, ALERT, 1974. 91p. Engl.

See also entries 1281 (volume 2), 1894, and 1895. Diagnosis and treatment of leprosy in the field is the theme of this handbook for health personnel. It is divided into seven parts and is presented in simple language so that those speaking English as a second language can understand it. It defines and describes leprosy, explains methods for diagnosing the disease, and outlines principles of drug and physical therapy. Questionnaires that might be used in physical examination are included, and pictures and drawings illustrate concepts. Also included are questions to test the reader's assimilation of the information set forth. (AC)

- 1931 Rural Education Institute, Cochabamba. Nutrition. (Nutrition).** Cochabamba, Bolivia, Rural Education Institute, 1968. 22p. Span.

This pamphlet was prepared for the students of the "Instituto Campesino de Educacion" (Rural Education Institute) in Bolivia. It establishes the basic principles of a balanced diet (using local foods) and describes the nutritional value of vegetables and animal products. It then discusses some popular misconceptions concerning the ill effects of certain foods such as eggs, bananas, and cheese upon the unborn and newborn child. The style is simple and straightforward, making the publication accessible to readers with little education. (HC)

- 1932 Rural Education Institute, Cochabamba. Aparato digestivo, aparato respiratorio, aparato circulatorio. (Digestive, respiratory, and circulatory systems).** Cochabamba, Bolivia, Rural Education Institute, n.d. 1v. (unpaged). Span.

This pamphlet was prepared for students of the "Instituto Campesino de Educacion" (Rural Education Institute) in Bolivia. It deals with the constitution and functioning of the digestive, respiratory, and circulatory systems in the human body. It includes notions on health and hygiene as well as several illustrations. The

style is simple and straightforward, making the publication accessible to readers with little education. (HC)

- 1933 Scotney, N.** *Health education: a manual for medical assistants and other rural health workers.* Nairobi, African Medical and Research Foundation, Rural Health Series 3, 1976. 141p. Engl.

See also entries 1637, 1898, 1906, and 1918.

"How to do health education" in East Africa is the focus of this handbook, although it also provides a rationale for health education and a look at the reasons that some health education programmes have failed. It is designed to be a practical aid to health staff in their work day-by-day, and it is written in simple language. At the end of each chapter, the important information is summarized. There are 16 chapters covering home visiting, health education in the health centre, responsibilities of different health workers, community and group health education, special needs, and procedures for evaluation. Four appendices are set forth, and these comprise some popular definitions of health education, sources of health education materials and advice, a commentary on problems of health education, and an article on behavioural responses of an audience. (AC)

- 1934 St. John Ambulance Association, London. St. Andrew's Ambulance Association, Glasgow. British Red Cross Society, London.** *First aid. 3 edition.* London, British Red Cross Society, 1972. 223p. Engl.

This manual provides the material for the standard first aid course offered by three voluntary aid societies in Britain. The 15 chapters cover the principles of first aid and emergency action; the structure and functions of the body; preparing and applying dressings and bandages; causes of asphyxia and methods of resuscitation; wounds and circulatory failure; shock; injuries to bones, muscles, joints, and ligaments; burns and scalds; poisoning; and procedures for handling and transporting injured persons. A syllabus is set forth for covering the material and each session includes a theoretical and a practical portion. Instructions are presented in step form, and sections are cross-referenced where they overlap. The manual is illustrated, and an index is provided. (AC)

- 1935 St. John Ambulance, Ottawa.** *Child care in the home.* Ottawa, St. John Ambulance, 1971. 128p. Engl.

This manual, a parent's handbook to the care of infants and preschoolers, describes the general pattern or sequence of growth from infancy to school age and outlines principles of child guidance. It comprises nine chapters, which include caring for and feeding the new baby, keeping the child healthy and happy, keeping the child safe, and preventing and recognizing common ailments in childhood. The babysitter's responsibilities are also discussed, and an index is set forth. The social and cultural milieu in which the book is presented is representative of developed countries. (AC)

- 1936 State of Alaska, Department of Health and Welfare.** *Midwifery teaching guide for public health nurses.* Juneau, Alaska, Department of Health and Welfare, Division of Public Health, 1966. 39p. Engl.

See also entry 1873.

This guide is meant to be used in conjunction with the *Manual for Alaska's Midwives*. The two have been abstracted separately here but are available in one combined volume. The guide provides the public health nurse with a general plan to follow in instructing village midwives and mothers in healthy midwifery practices. Part one discusses the factors to be considered when planning midwifery classes: village readiness, class location, suitability of course content, the language barrier, etc. Part two contains a suggested teaching schedule. Part three is a brief revision of the principles of good supervision, and part four is a list of teaching tools (films, booklets, demonstration equipment, etc.) available from the Health Education Division, Department of Health and Welfare, Alaska. (HC)

- 1937 Summer Institute of Linguistics, Huntington Beach, Ca.** *Field worker's medical manual.* Tlalpan, Mexico, Summer Institute of Linguistics, Oct 1973. 601p. Engl.

A layperson's guide to basic health care, this manual is intended for use by field-workers who have not had training in health-related fields. The first chapter is an overview of the human body, and the introduction stresses that this chapter should be studied carefully and reviewed periodically. Chapters on symptoms and physical examination explain how to identify a medical problem, and these are followed by several chapters on treating ailments, such as nutritional diseases, eye diseases, and skin disorders. The final portion of the manual details technical procedures such as fluid therapy, artificial respiration, and sterilization of equipment. This portion also includes chapters on pharmacology, equipment for a field clinic, and suggestions for a medical library. The book is illustrated and indexed. To aid the user in referring to relevant sections, the table of contents has a series of black arrows that correspond to marks in the different chapters. Simple definitions are given, but the reader is expected to translate some words by referring to a chart of Greek words that are the base for many medical terms. (AC)

- 1938 Taylor, D.M.** *Notes for the use of nurses in African practice.* Gwelo, Rhodesia, Gwelo General Hospital, n.d. 133p. Engl.

Designed for use by auxiliary health personnel who provide primary health care in Africa, this book assembles a vast number of notes on signs and symptoms, diagnoses, treatments, and follow-up measures. It is intended as a reference guide, and both the index and the table of contents are comprehensive lists to facilitate referral. The notes are brief and practical, and they stress the essential facts. The book's introduction emphasizes the importance of the medical history and

physical examination and presents steps for undertaking both. In addition, urgent physical signs have been listed separately as have steps for preparing a patient for radiological investigation. Lists of normal clinical values for blood, serum, and cerebrospinal fluid are provided, and height and weight tables are set forth. (AC)

1939 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: tratamiento de ascariis: auxiliar de enfermeria. (Programmed instruction for auxiliary health workers: ascariasis treatment)*. Cali, Colombia, Universidad del Valle, n.d. 13p. Span.

See also entries 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1961, 1962, and 1963.

The objective of this manual is to provide auxiliary health workers in Colombia with the information necessary to recognize and treat persons who suffer from ascariasis. The student is told that parasites are small creatures that live in man's body and that those living within the intestines, e.g., ascarids, leave the body through defecation and can be observed in the faeces. Ascarids resemble earthworms, and patients whose faeces contain them should be given piperazine twice daily (before breakfast and supper; dosage dependent on age). Patients should also be made aware of the possibility of dizziness, nausea, etc., due to treatment. Each statement in the manual is followed immediately by a similar one from which key words have been omitted. The student who is unable to fill in the blanks correctly is instructed to reread the complete statement carefully. At intervals throughout the book, the student is retested. (AC)

1940 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: primeros auxilios en intoxicacion: auxiliar de enfermeria. (Programmed instruction for auxiliary health workers: first aid in poisoning cases)*. Cali, Colombia, Universidad del Valle, n.d. 30p. Span.

See also entries 1939, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1961, 1962, and 1963.

Teaching auxiliary health workers in Colombia to administer first aid to victims of poisoning is the aim of this training manual. The health worker is taught that poisoning results when a toxic substance enters the human organism and that poisons can be swallowed, inhaled, or absorbed through the skin. When confronted with a victim of poisoning, the health worker should ensure that qualified medical help is summoned, that the victim is breathing, that his heart is beating, that he is in a well ventilated room, and that he is lying down. A person who is not breathing should receive mouth-to-mouth resuscitation, and one whose heart is not beating requires heart compression. Although these measures are not described in the present manual, they are part of the overall course for auxiliary health workers. If the victim has been handling insecticides, he should be bathed immediately. If he has swallowed caustic or corrosive substances, such as ammonia or battery acid, he should be given milk or egg whites

mixed with water to drink; however, in other cases of poisoning by mouth, vomiting should be induced. The format of the manual is a type of programmed instruction. A concept is stated and immediately repeated with the key words omitted, and the health worker is expected to fill in the missing words correctly. (AC)

1941 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: movilizacion de accidentados y fracturas: auxiliar de enfermeria. (Programmed instruction for auxiliary health workers: transporting accident victims)*. Cali, Colombia, Universidad del Valle, n.d. 22p. Span.

See also entries 1939, 1940, 1942, 1943, 1944, 1945, 1946, 1947, 1961, 1962, and 1963.

The auxiliary health worker in Colombia, upon completion of this unit of study, should be able to move accident victims and apply first aid for fractures. Illustrations are included, and each concept within the manual is stated and followed immediately by a similar statement that has blank spaces for key words. Students are asked to complete the unfinished statement correctly. (AC)

1942 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: primeros auxilios en heridas: auxiliar de enfermeria. (Programmed instruction for auxiliary health workers: first aid for wounds)*. Cali, Colombia, Universidad del Valle, n.d. 23p. Span.

See also entries 1939, 1940, 1941, 1943, 1944, 1945, 1946, 1947, 1961, 1962, and 1963.

A form of programmed instruction, this manual aims at teaching Colombian auxiliary health workers how to administer first aid for wounds. The first step is to examine the wound carefully and establish the source of blood flow. The next is to wash the wound with clean water, and then stop the bleeding by pulling the wound together, applying gauze or a rag directly to it, and pressing hard for about 5 minutes, or by tying a rag above the wound. If neither of these methods stops the bleeding, a tourniquet (a leather, rubber, or cloth band) should be tied tightly above the wound for a severed artery (bright red blood) and below the wound for a vein (dark red blood). The tourniquet should be loosened for 5 minutes every half hour, and once the bleeding has been controlled, the patient should be examined for shock. Signs of shock are faint pulse, cold but sweaty skin, weak respiration, etc. A victim in shock should be blanketed and, if the wound is not in the stomach or abdomen, given all the sugar and water he can take. The steps for treating wounds are explained simply and repeated immediately with key words omitted, the health worker being expected to fill in the missing words correctly. Review questions are also included. (AC)

1943 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: unidad sobre diarreas: promotoras de salud. (Programmed instruction for health promoters: diarrhea)*. Cali,

Colombia, Universidad del Valle, n.d. 29p. Span.
See also entries 1939, 1940, 1941, 1942, 1944, 1945, 1946, 1947, 1961, 1962, and 1963.

Rural health promoters at the Universidad del Valle in Colombia study many aspects of primary health care using manuals such as this one, which provides a simple method for recognizing and treating diarrhea in children. It explains the symptoms and consequences of the dehydration and fever that might accompany diarrhea and advises that an affected child who is dehydrated or who is vomiting should be taken to a doctor at once. However, the manual notes that most other cases of diarrhea can be treated by a parent and it gives appropriate instruction for controlling fever and replacing fluid loss. If the diarrhea continues for more than 2 days despite this treatment, a doctor should be consulted. (AC)

1944 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: saneamiento ambiental: promotoras de salud.* (Programmed instruction for health promoters: environmental health). Cali, Colombia, Universidad del Valle, n.d. 19p. Span.

See also entries 1939, 1940, 1941, 1942, 1943, 1945, 1946, 1947, 1961, 1962, and 1963.

This unit in the series of programmed instruction for Colombian rural health promoters teaches the following: water may be contaminated and hence the purveyor of three serious diseases — diarrhea, parasites, and typhoid; water can be safely used for infant feeding and bathing, and drinking, only if it is boiled in a clean pot for 15 minutes; serious diseases transmitted by rats, cockroaches, and mosquitoes can be avoided if garbage is gathered in a metal container with a lid and burned daily outside the house; and latrines must be equipped with a lid and be kept clean, used toilet paper must be burned daily, and the toilet must be purified with 2 litres of oil every month. Information is stated and then restated with a key word left blank for the student to fill in. The final aim of the course is to enable the health promoter to pass this information on to the families of the *barrio*. (HC)

1945 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: vacunacion: promotoras de salud.* (Programmed instruction for health promoters: vaccination). Cali, Colombia, Universidad del Valle, n.d. 17p. Span.

See also entries 1939, 1940, 1941, 1942, 1943, 1944, 1946, 1947, 1961, 1962, and 1963.

The course for rural health promoters in Universidad del Valle, Cali, Colombia, includes a section on vaccinations. The corresponding manual, like most of the other training manuals for the course, is a form of programmed instruction. The student is asked to read the information provided and to fill in the blanks where key words have been omitted. The schedules for vaccines that protect children from diphtheria, pertussis, and tetanus (DPT vaccine); poliomyelitis (sabin or salk vaccine); tuberculosis (BCG); and smallpox are reviewed

cursorily. Contraindications to vaccination are described. (AC)

1946 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: clasificacion nutricional del nino menor de 5 anos: promotoras de salud.* (Programmed instruction for health promoters: nutritional evaluation of children under 5). Cali, Colombia, Universidad del Valle, n.d. 31p. Span.

See also entries 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1947, 1961, 1962, and 1963.

Evaluating the nutritional status of children under the age of 5 is one responsibility of the rural health promoter in Colombia, and this manual explains a method of doing this using age and weight. This method assumes that at a certain age a child's weight should fall within a certain range. If it falls below that range, the child is considered malnourished and the seriousness of his condition is indicated by the range within which his weight falls. An age-weight chart is included in the manual, and simple practice exercises are provided so the student may better understand the use of the chart. (AC)

1947 Universidad del Valle, Division de Salud, Cali, Colombia. *Instruccion programada: unidad sobre tuberculosis: promotoras de salud.* (Programmed instruction for rural health promoters: tuberculosis). Cali, Colombia, Universidad del Valle, n.d. 28p. Span.

See also entries 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1961, 1962, and 1963.

This manual is part of a series of programmed instruction for Colombian rural health promoters. It aims at teaching the student how to vaccinate a child against tuberculosis, how to interpret the results of a tuberculin test in a child under 5 years, and how to explain to the family what they must do if their child, or a member of the household, contracts the disease. Each bit of information is simply stated and then immediately repeated with a key word left blank for the student to fill in. Certain procedures, such as tuberculin testing, are illustrated. (AC)

1948 University of Havana, Havana. *Nociones de higiene. (Rudiments of hygiene).* Havana, Ciencia y Tecnica Instituto Cubano del Libro, 1971. 504p. Span.

The department of preventive medicine of the University of Havana designed this book as a textbook for medical students and a reference manual for practicing doctors. In addition to presenting general information on hygiene, it applies this information to conditions prevailing in Cuba, especially the rural areas. Chapters on the following subjects are included: the environment and the relationship between hygiene and health, water control, water supply, control of wastewater and products, garbage control, insect and rodent control, pesticides, ventilation, lighting, noise and atmospheric pollution, housing, public places, hospital hygiene, food hygiene, milk and dairy products, public eating

places, industrial medicine, the physiology of physical labour, worker fatigue, medical examinations of workers, worker health, industrial accidents, work-related illnesses, international sanitary control, and health education. (RD)

- 1949 Vieux, N., Jolis, P.** Croix-Rouge Francaise, Paris. *Manuel de secourisme. (First aid manual)*. Paris, Flammarion Medecine-Sciences, 1973. 301p. Fren.

A comprehensive, how-to manual of first-aid procedures, this book details measures to be taken in cases of excessive bleeding, fractured and dislocated bones, wounds, burns and scalds, infectious and gastrointestinal diseases, and accidents. It also explains methods of giving artificial respiration, making and applying bandages, handling accident victims, constructing a stretcher, and transporting patients. Finally, it sets forth steps for combatting large-scale disasters and preventing accidents. The manual is illustrated, and an index is provided. (AC)

- 1950 Wagner, E.G., Lanoix, J.N.** WHO, Geneva. *Water supply for rural areas and small communities*. Geneva, WHO Monograph Series No.42, 1959. 340p. Engl.

The planning, construction, operation, and maintenance of a safe water supply are the subject of this publication sponsored by the World Health Organization. The best source of water needs no treatment and can be delivered to the consumer through gravity; however, planners who do not have a perfect source should prefer water that needs no treatment but must be pumped to the consumer, to water that needs treatment but can be provided through gravity. Sources are groundwater and surface water — the one requires excavation, the other often needs treatment. Groundwater wells are usually hand dug, bore-hole, or driven (jetted). Hand-dug wells, which are by far the most common in rural areas, should be lined with masonry or concrete, and the mouth of the well should be kept covered when not in use so that insects, etc. will not enter it. The different types of pumps used in small water supplies are described, and their efficiency, cost, advantages, and disadvantages are set forth. Annexed are instructions for flow measurements, collection of water samples, construction of hand-dug wells, etc. A selected bibliography and an index are presented. (AC)

- 1951 Wagner, E.G., Lanoix, J.N.** WHO, Geneva. *Excreta disposal for rural areas and small communities*. Geneva, WHO Monograph Series No.39, 1958. 187p. Engl.

Persons who are responsible for rural sanitation will find this monograph a valuable reference source; it not only comprehensively details methods of privy and waterborne excreta disposal but also emphasizes the importance and achievement of community participation in sanitation systems. In determining the most suitable disposal system, planners should consider the quantities of faeces with which the system will have to

cope, the possibilities for soil and groundwater pollution, insect breeding habits, costs, and public attitudes. Privy methods of disposal include the pit privy, aqua privy, water-seal latrine, bored-hole latrine, bucket latrine, trench latrine, overhung latrine, compost privy, and chemical toilet. Methods of construction and advantages and disadvantages of each are discussed. Water-carried methods of disposal include dilution, cesspool, seepage pit, and septic tank. These methods are detailed and information for their construction provided. Disposal of effluent from septic systems is also reviewed. Annexed is a short summary of the education of health inspectors, health assistants, health aides, and voluntary leaders. An index is included. (AC)

- 1952 WHO, Geneva.** *Training for malaria eradication*. Geneva, WHO, 1967. 33p. WHO/Mal/67.624. Engl.
Workshop, Malaria Eradication Training Centre, Lagos, Nigeria, 24 Apr-6 May 1967.
See also entry 1893.

Representatives from WHO, the U.S. Public Health Service, and the National Communicable Disease Center (USA) met in Lagos, Nigeria, to share current teaching methods and to prepare a curriculum for a course for instructors of malaria eradication. The proceedings of that workshop, which constitute this document, review the learning process, feedback mechanisms, and the application of learning theory in malaria eradication. Effective use of the lecture, demonstration, overhead projector, films, and other audiovisual aids, is also delineated; role playing and different modes of promoting discussion are recommended. Three types of programmed instruction — linear, branching, and mathematics — are explained and applied to malaria eradication. The evaluation of student performance through subjective and objective testing is discussed and a schedule for examinations is included. (AC)

IV.7.2 Family Planning and Midwifery

See also: 1401, 1592, 1663, 1790, 1838, 1840, 1841, 1844, 1847, 1873

- 1953 British Red Cross Society, London.** *Practical care of mother and child (overseas edition)*. London, E.P. Publishing, 1965. 48p. Engl.
See also entries 1902, 1903, 1904, and 1905.

Health workers in developing countries who teach expectant and new mothers how to care for themselves and their children may wish to adopt the text of this manual. In it, the pregnant woman is encouraged to consume foods that contain protein, milk, honey, tomatoes, green vegetables, fruits, nut oil, and plenty of water. She is warned of constipation, indigestion, swollen feet, etc., which may accompany pregnancy, and instructed not to take any medication not prescribed by a doctor or nurse. At about 4 months gestation, she is

urged to begin preparing for the baby – housecleaning, boiling and storing water, and collecting diapers, vests, etc. Procedures for diapering the baby and washing woollen and cotton clothes are illustrated. Several makeshift beds are also diagramed, and a cheesecloth tent is recommended where protection from insects is desirable. Although breast-feeding is urged, instructions are given for bottle-feeding with dried milk and liquid cow's or goat's milk. When the baby reaches age 5 or 6 months, foods such as gruel made with milk, millet, maize, rice, or beans; meat or fish soup; mashed meat, fish, green vegetables, bananas, guava, tomatoes, mangoes, beans, potatoes, carrots; and bread, honey, eggs, and milk puddings should be introduced into his diet. Cleanliness is emphasized throughout the manual, and a rough guide to the baby's development is included. (AC)

1954 Gamble, C.J., Guttmacher, A.F. *Family planning: a challenge to health workers of every nation*. Boston, Pathfinder Fund, n.d. 23p. Engl.

All health personnel should be made aware of the aims and methods of family planning so that they may actively promote the use of available family planning services. This is the basic premise of this booklet on family planning, written in simple language with examples of ways that health workers can approach patients. The efficacy and mode of contraceptive action are explained for the condom; intrauterine device; oral contraceptive; spermicidal jelly, cream, foam, or paste; coitus interruptus; douching; diaphragm; cap; rhythm; and surgical intervention. Sources for additional family planning literature are noted, and these include the Pathfinder Fund, Planned Parenthood-World Population, International Planned Parenthood Federation, and the Population Council. (AC)

1955 International Planned Parenthood Federation, Kuala Lumpur. *Contraceptive methods: a guide for family planning workers*. Kuala Lumpur, International Planned Parenthood Federation, Southeast Asia and Oceania Region, May 1970. 50p. Engl.

In this handbook for family planning workers, the following methods of contraception are discussed and illustrated: condom, vasectomy, diaphragm, douche, contraceptive injection, intrauterine device, tubal ligation, oral contraceptive, rhythm, and "vagitories," i.e., tablets and suppositories, creams, jellies, foams, and pastes. Included is information on how to use each method, why it works, its advantages, disadvantages, relative reliability, contraindications, and whether or not it must be prescribed by a doctor. The step-by-step procedure for inserting an intrauterine device – including history taking and preinsertion examination – is outlined. (HC)

1956 International Planned Parenthood Federation, London. *Introducing contraception*. London, International Planned Parenthood Federation, n.d. 10p. Engl.

The International Planned Parenthood Federation presents a simple, straightforward account of different methods of contraception including the birth control pill, the intrauterine device, the diaphragm, the rhythm method, sterilization, the condom, withdrawal, and spermicides. Breast-feeding and douching are not recommended. (RD)

1957 Kleinman, R.L., ed(s). *International Planned Parenthood Federation, London. Family planning handbook for doctors*. London, International Planned Parenthood Federation, 1974. 173p. Engl.

This International Planned Parenthood Federation handbook has been revised to help physicians keep abreast of the latest trends and developments in the field of family planning. Included are chapters on coitus interruptus, induced abortion, condoms, systemic contraception (birth control pills or injections), intrauterine contraception, male and female sterilization, the rhythm method, caps and spermicides, subfertility, sexually transmitted diseases, cervical and vaginal cytology, and equipping and running family planning clinics. Each contraceptive method is described and discussed in terms of historical development, effectiveness, mode of action, possible side effects and long-term complications, suitability, availability, and contraindications. The physician is instructed in the procedures for using a vacuum aspirator and for the insertion and removal of intrauterine devices. Information on utilization rates, popularity, packaging, etc., of contraceptives in both developed and developing countries is included. Moral and legal aspects of birth control, especially induced abortion, are considered in the introduction. Appendix A contains simple instructions for contraceptive users. Other appendices list IPPF addresses and publications. (RD)

1958 Kleinman, R.L., ed(s). *International Planned Parenthood Federation, London. Manual medico: anticoncepcion. (Medical manual: contraception)*. London, International Planned Parenthood Federation, 1967. 159p. Span.

Available also in French, German, Italian, Portuguese, and English.

This manual explains the objectives of family planning, lists the equipment and personnel required by a family planning clinic, and details contraceptive methods, their overall effectiveness, and the factors involved in their selection. The appendices include a list of family planning centres throughout the world; teaching procedures and instructions for various contraceptives; advice to patients traveling in other countries; a list of suppliers of anatomical models for teaching purposes; and a bibliography of IPPF publications. (RD)

1959 Mysore State, India, Directorate of Health Services. *Draft, manual for family planning field workers*. Mysore, India, Directorate of Health Services, n.d. 1v.(various pagings). Engl.

This draft manual covers a wide range of topics relating to the family planning programme of Mysore State, India. After explanatory chapters on the needs and objectives of family planning, separate chapters deal with the methods to be followed, the sociocultural factors involved, the selection criteria for persons to receive family planning advice and treatment, and the implementing and evaluation of programmes. Appendices detail some of the methods used in pursuing the programme, in training at all levels, and the functions of personnel. (DL)

- 1960 Philpott, R.H., Sapire, K.E.** Family Planning Association of Rhodesia, Salisbury. *Obstetrics, family planning and paediatrics: a manual of practical management for doctors and nurses*. Salisbury, Family Planning Association of Rhodesia, n.d. 106p. Engl.

In developing countries, where birthrate and maternal and infant mortality are high, obstetrics, family planning, and pediatrics must be integrated; recognizing this, the authors of this manual for doctors and nurses have incorporated important elements of all three. The first section, obstetrics, includes information on antenatal and postpartum care, management of labour and birth, and abnormal presentations. The second section, family planning, reviews the different methods of contraception and their efficacy and describes the basic requirements of a family planning clinic. The final section, pediatrics, summarizes basic elements of managing a pediatric ward and a maternal child health clinic in a developing country; lists some useful drug dosages in pediatric practice; and outlines aetiology, symptoms, treatment, and preventive measures for kwashiorkor, marasmus, diarrhea, neonatal tetanus, bacterial meningitis, measles, respiratory tract infections, tuberculosis, acute nephritis, and heart failure. Included also are a percentile weight chart and an immunization schedule. (AC)

- 1961 Universidad del Valle, Division de Salud, Cali, Colombia.** *Instruccion programada: citologia vaginal: auxiliar de enfermeria. (Programmed instruction for auxiliary health workers: vaginal cytology)*. Cali, Colombia, Universidad del Valle, n.d. 30p. Span.
See also entries 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1962, and 1963.

Auxiliary health workers in Colombia must learn to take vaginal smears and advise patients on their results. This manual, which is a type of programmed instruction, provides some of the information necessary for this task. It characterizes the normal cervix as free from lacerations and erosions and uniform in colour (rose). Deviations from this indicate the need for a vaginal smear, and the results (obtained from a laboratory) are graded I to V. Grades I and II indicate the absence of carcinoma, and, in most cases, the patient should only be advised to return in a year for another smear. However, grade II cases are those where some inflammation of cells exists and the patient with severe inflammation (grade II, severe inflammation) should be advised to

see a doctor. Grades III, IV, and V indicate serious cytological results, which range from suspicion of malignant neoplasms to their actual presence, and in each case the patient should be urged to see a doctor immediately. (AC)

- 1962 Universidad del Valle, Division de Salud, Cali, Colombia.** *Instruccion programada: toma de muestra para citologia vaginal: auxiliar de enfermeria. (Programmed instruction for auxiliary health workers: sample-taking in vaginal cytology)*. Cali, Colombia, Universidad del Valle, n.d. 13p. Span.
See also entries 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1961, and 1963.

The steps for taking vaginal smears are explained and illustrated so that auxiliary health workers in Colombia may annually screen patients for vaginal carcinoma. An applicator, speculum, slide, alcohol (95%), and gloves are required. The health worker should observe the cervix (a normal cervix will be rosy and smooth) and then insert the applicator into the endocervical canal and rotate it to scrape the surface for mucus. This sample should be sent to the laboratory for cytological examination. Depending on the results (graded I to V), the woman should be advised either to return in a year for a new test or to see a doctor. (AC)

- 1963 Universidad del Valle, Division de Salud, Cali, Colombia.** *Instruccion programada: cuidados con el recién nacido: promotoras de salud. (Programmed instruction for health promoters: care of the newborn)*. Cali, Colombia, Universidad del Valle, n.d. 33p. Span.
See also entries 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1961 and 1962.

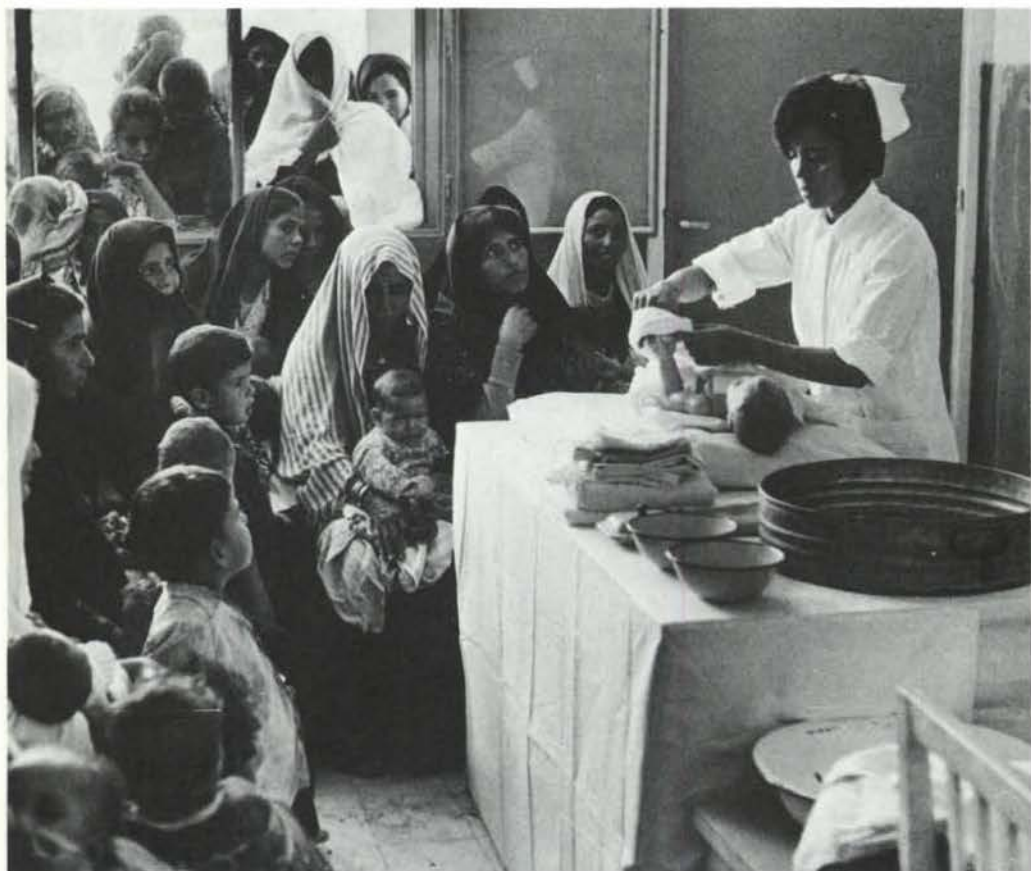
Rural health promoters in Colombia are provided, in this manual, with the background necessary for teaching new mothers to care for their babies. The new mother should be instructed to clean the umbilical cord with alcohol-soaked cotton and to watch for bleeding. Other things she should be told include the importance of alternating the baby's position regularly from his side to his stomach, of changing diapers frequently, and of bathing him every day (preferably in the morning). The new mother should be urged to breast-feed, because her milk is the best possible food for the baby; however, there is some danger that the breast will press the baby's nose and interfere with breathing or nursing, and the mother should be warned of this possibility. The equipment for bottle-feeding is delineated, and the need for sterilization before use is emphasized. Instructions for giving a sponge bath (before the cord falls off) are also included, and the health promoter is reminded that the mother should take the baby to a nearby health centre soon after birth for a checkup and a vaccination schedule. (AC)

- 1964 USA, Agency for International Development, Department of State.** *Education in health*. Washington, D.C., Agency for International Development, Department of State, 1963. 127p. Engl.

This report of the Asian Health Conference held in Tagatay, the Philippines, in 1962 aims to assist public health workers in undertaking four major health programmes — malaria eradication, environmental sanitation, school health, and maternal and child health. In the four topic areas, a background is made of an imaginary town where the programme is sited. Problems anticipated in completing the programme and means of identifying educational needs are discussed. The preparation of workers is also covered. The report suggests that many problems dealing with the success of health programmes can be alleviated or prevented through community nonformal education programmes. (Modified journal abstract.)

1965 Yabour de Caldera, I.E. *Evaluation of family planning experimental information and education programs at Maternidad Concepcion Palacios, Caracas, Venezuela.* Ithaca, N.Y., Cornell University, Jun 1974. 182p. Engl. Refs. Doctoral dissertation.

A "family planning communication" programme in Caracas, Venezuela, tested six different teaching methods for their relative abilities to motivate family planning acceptors. The methods included a lecture, a film, group discussion, combined group discussion and film, traditional bedside talk, and a pamphlet. A group of 2 100 women were selected for the study: 300 in each educational group and 300 in a control group (without overt motivation). Each woman had either aborted or given birth to a child during March-April 1973 in Maternidad Concepcion Palacios, a maternity hospital in Caracas. Although 94% of the entire group expressed an interest in family planning, only 7% of the control group actually attended a family planning clinic, whereas 15% of those who received a "traditional bedside talk" and 21% of those in the five other experimental groups attended the clinic. The teaching approach using a film proved the most successful motivator, and the pamphlet ranked second. Group discussions occupied an intermediate position, while the lecture proved less valuable than the traditional bedside approach. (AC)



Middle East Palestine refugees at the UNRWA Health Centre in Khan Younis Camp, Gaza Strip, are shown how to handle their newborn babies by a UNRWA staff nurse.

V. Formal Evaluative Studies

V.1 Health Manpower

See also: 1414, 1469, 1503, 1877, 1985, 1987, 1988, 1989, 1991, 1995, 1999, 2002, 2016, 2033, 2089

- 1966 Berggren, W.L.** Pan American Health Organization, Washington, D.C. *Control of neonatal tetanus in rural Haiti through the utilization of medical auxiliaries.* In *Medical Auxiliaries*, Washington, D.C., Pan American Health Organization, Scientific Publication No.278, 1973, 40-44. Engl.

Twelfth Meeting PAHO Advisory Committee on Medical Research, Washington, D.C., 25 Jun 1973.

See entry 1659 for complete proceedings.

This paper describes the successful introduction of medical auxiliaries in Haiti to tackle neonatal tetanus, a disease of major public health importance. In 1967, after 12 years of operation, the Albert Schweitzer Hospital had succeeded in reducing the incidence of this disease within the immediate community. However, admissions had actually increased because more patients from outlying districts were coming to the hospital for treatment. In 1968, immunization services were extended to rural areas by holding outdoor clinics in the major markets. Each immunization team of 30 to 40 personnel contained only one doctor or nurse; the rest were medical auxiliaries, many of whom were recruited and trained locally. In 4 years, the services reached the hospital's entire catchment area of 94 000 people, and the number of hospital admissions for neonatal tetanus sharply declined. The estimated cost of the hospital treatment averted by the programme (\$494 000 for 41 140 days of caring for 2 320 patients) was more than seven times the total cost of the programme (\$67 000). Furthermore, many recruits originally employed to help with the immunization subsequently became involved in other control programmes (e.g., tuberculosis, malnutrition), and the overall effectiveness of these activities has been manifested by the marked reduction in infant mortality. (MPM)

- 1967 Brodt, W.** *Implications for training curricula from a task inventory survey of Indian community health representatives.* Public Health Reports (Rockville, Md.), 90(6), Nov-Dec 1975, 552-560. Engl. 12 refs.

The U.S. Indian Health Service, established in 1955, has experimented successfully with several health programmes that rely on native persons to liaise with the Indian population and health professionals, and to provide preventive health measures. The most recent of these is the community health representative (CHR) scheme. This programme was established in 1968, and although evidence after that time suggested that roles of CHRs were changing, the basic curricula had been revised only minimally. To determine whether changes were really warranted and, if so, what directions they should take, a survey was undertaken. Eight Indian Health Service staff and 718 CHRs, employed by various tribes, received questionnaires; all staff and 494 CHRs responded. The purpose of the questionnaire was to ascertain what tasks were performed by CHRs, how often they were performed, and what priority CHRs assigned to them. Questions also attempted to separate the role of "listener" from that of "initiator" so that curricula could be revised if need be to reflect the required role. Results of the survey suggested that criteria for student selection should be more structured and that curricula should shift emphasis to the listener role. A demographic profile of the CHRs indicated that men and women were equally likely to assume management functions and to work with people, although men were more likely to undertake environmental activities. Questionnaire results are tabulated. (AC)

- 1968 Caunan, C.J.** *Training programs for nurses in training hospitals in Manila and suburbs under Department of Health Administrative Order No.116.* Centro Escolar University Graduate and Faculty Studies (Manila), 19, 1968-1969, 284-299. Engl.

An investigation of nurse training in five hospitals in Manila revealed that staff, funds, facilities, and resource materials were seriously lacking and that most programmes had insufficient organizational structure and follow-up. One hospital employed a full-time officer in charge of training for all professions; however, the others left this responsibility to the head nurse. Compensation and salaries for training activities were minimal. Full-time nursing instructors ranged from three to five, and their student loads from 80 to 150. No hospital budgeted specifically for training; therefore, equipment, supplies, training facilities, and expenses for guest lecturers could not be funded. Evaluation and follow-up of students was focused on the mechanics and tools of training instead of the result of training. Clinical instructors, whose function was to follow up students, exhibited excessively high turnover

rates and thus were unavailable for much of the time. Recommendations include recognizing the training component in the administrative structure of each hospital and allocating adequate training facilities and funds for the task. (AC)

- 1969 Colombia, Ministry of Public Health.** *Estudio experimental de servicios de salud en Colombia: funcion y adiestramiento de personal auxiliar: metodologia y resultados.* (Experimental study of health services in Colombia: the training and function of auxiliary personnel: methodology and results.) Bogota, Ministry of Public Health, Jul 1974. 100p. Span.

An experiment in the utilization of auxiliary health personnel was carried out in three rural areas, each representative of a particular set of ecologic and climatic conditions found in Colombia. The long-term objective was to translate the national health policy into appropriate curricula and teaching material for both professional and auxiliary health personnel. The more immediate objectives consisted of determining the effect of increased delegation of tasks to auxiliaries; greater emphasis on the role of the professional in referral, supervision, and evaluation; and the full-time devotion of the physician to a specific range of activities. The methodology (outlined in part I) consisted of an evaluation of the health status, resources, etc., in the three areas; preparation of appropriate health programmes; preparation of training manuals and training programmes for the required personnel; stepping up the activity of existing health services and increasing the number of health posts; and evaluation. The statistical data gathered during the study are set forth in 49 tables in part II. These focus on the utilization of health services by the people and on the activities assumed by the auxiliaries. (HC)

- 1970 Lesotho, Ministry of Health.** *Manpower projections.* Maseru, Lesotho, Ministry of Health, 26 Feb 1974. 3p. Engl.
Unpublished document.

In 1974, health manpower requirements in Lesotho could be summarized simply: adequate numbers of doctors; sufficient nurses; and desperate shortages in paramedical personnel. Provisions existed for ample medical scholarships; therefore, projections for physician-to-population ratios were good. About 400 nurses were registered with the Lesotho Nursing Council, and this number proved sufficient. In fact, a report on the Polytechnic Mission to Botswana, Lesotho, and Swaziland suggested that many nurses be trained in diagnosis and treatment to relieve the severe shortage of medical auxiliaries. Difficulties in recruiting medical auxiliaries stemmed from low salaries, lack of career patterns, and subprofessional status. Prospects for pharmacists, physiotherapists, laboratory technicians, health inspectors, and health educators were almost nil; however, those for medical auxiliaries, health assistants, and dispensers were not quite so dismal. (AC)

- 1971 Malawi Medical Bulletin, Blantyre.** *Medical assistant in Malawi.* Malawi Medical Bulletin (Blantyre), 4, 1970, 74-77. Engl.
Editorial.

A survey was carried out in Malawi to determine what proportion of the medical workload was being carried out by medical assistants and whether this cadre would be necessary in the future. The survey revealed that, in 1968, 165 nonprofessional staff in health units without doctors handled 6 713 614 outpatients (or 66% of the total). Assuming that these staff saw patients every hour of the standard government working hours (42 per week for 52 weeks a year), then each patient was seen for 3 minutes and 13 seconds. For handling this proportion of the workload, medical assistants received an estimated 10% of the country's medical budget. It is concluded that any criticism of the medical assistant as a cadre must be attributed to standards imposed by the above-mentioned workload, for without him, there would be no health service in Malawi. Even in the (unlikely) event that enough doctors were to become available in the future, the medical assistant would still be valuable in his own right to bring improved services into villages through health teaching, immunization, disease detection, prevention, and follow-up. Some general considerations regarding medical assistants' training, support, and career structure follow. (HC)

- 1972 Pakistan Research and Evaluation Centre, Lahore.** *Urban dai organizer: performance and attitudes.* Pakistan Journal of Family Planning (Karachi), 2(1), Jan 1968, 7-12. Engl.

The performance, knowledge, and attitudes of urban dais in Pakistan have been investigated for two reasons: to help increase the number of clients at a family planning clinic used extensively for training and to help develop a dai syllabus for provincial mobile training teams. About 100 dais were interviewed to determine their knowledge of family planning, commitment to the programme, and recruiting success. The results indicate that (1) dais first recruit persons most familiar and accessible to them (i.e., relatives and newly delivered mothers) and then referral rates decline; (2) at least a quarter of the dais may be highly committed to the family planning programme and probably up to one-half of them have behaviour and beliefs consistent with commitment to the programme; about one-fifth do not approve of the IUD; and (3) many dais lack information that is essential to their work. The Family Planning Council has decided to utilize mobile training teams to assist family planning officers in retraining dais. The report concludes that although the samples are small, the study exemplifies a type of quick evaluation that is useful in correcting problems in family planning programmes. (HC)

- 1973 Pan American Health Organization, Washington, D.C.** *Delivery of primary care by medical auxiliaries: techniques of use and analysis of benefits achieved in some rural villages of Guatemala.* In Medical Auxiliaries, Washington, D.C., Pan

American Health Organization, Scientific Publication No.278, 1973, 24-37. Engl.

Twelfth Meeting, PAHO Advisory Committee on Medical Research, Washington, D.C., 25 Jun 1973.

See entry 1780 for complete proceedings.

A comparison of six rural health care programmes in Guatemala indicates that nonphysician primary care personnel are acceptable to communities, that they provide care at half the cost of physician-initiated care, and that their training costs from 10 to 20 times less than physician education. In the comparison, the reliability of data varies widely, but statistics for each programme include population coverage, education costs up to medical practice, caseload and referral rates, patient care appraisal mechanisms, and immunization rates. By comparing these data, the investigators show the cost-effective nature of employing nonphysicians to provide primary care and the long-term value of investing in close supervision during training of nonphysicians. They also comment on the importance of self-sufficiency and note that three of the four programmes using nonphysicians are moving toward that goal. Although none of the programmes aims solely at a reduction in morbidity and mortality, figures available for some of the programmes show remarkable decreases. Statistical data are included. (AC)

1974 Paredes-Manrique, R., Agualimpia, C. Colombian Association of Medical Faculties, Bogota. Colombia, Ministry of Public Health. *Study of human resources for health and medical education in Colombia: methods and results.* Bogota, Ministry of Public Health, Dec 1972. 217p. Engl., Span.

A comprehensive investigation into the Colombian health milieu was undertaken by the Ministry of Public Health and the Colombian Association of Medical Faculties to provide a base for a national health plan; research took the form of a national health survey, an inventory of available health facilities and manpower, and an assessment of the teaching institutions charged with preparing health personnel. Vital statistics registration, population census data and mortality were examined; morbidity figures from hospitals and outpatient facilities and from a sample household survey were also analyzed. The number and type of health facilities were charted as were the cost and efficiency of care they offered. Information about the numbers, distribution, and personal, professional, and educational characteristics of physicians and nurses were gathered, and an attempt was made to discover their frustrations and satisfactions with their practice. The overall study, which took 3 years, cost U.S. \$382 000; the total has been broken down into its components to provide a realistic picture of the expenditures, and all the data, which were assembled during the study, have been tabulated in the report. (AC)

1975 Reid, M. WHO, New Delhi. *Study of the activities of auxiliary nurse-midwives in Haryana,*

Punjab, and Gujarat states, India. New Delhi, WHO, 1969. 74p. WHO/SEA/Nurs/130. Engl.

Detailed results of a survey of the activities of 23 auxiliary nurse-midwives (ANMs) assigned to rural health centres in three Indian states are presented. The ANMs completed special forms to record where and how their time was spent (a specimen form and instructions appear in annex 1 of the report). On the basis of these records, data are presented on various subjects, e.g., numbers of different types of patient seen, time spent on different activities, number of home visits made. Ultimate objectives of the study are possible revision of the curriculum being used to prepare ANMs and more efficient utilization of the ANMs in community services. To this end the report contains several guidelines and recommendations concerning such aspects as determination of optimum workload, stricter control over the supply of drugs, strengthening of the curriculum in specific areas (e.g., family planning, dai supervision), and the need to cut down the amount of time currently spent on travel and paperwork. (MPM)

1976 Ronaghy, H.A., Zeighami, E., Farahmand, N., Zeighami, B. *Causes of physician migration: responses of Iranian physicians in the United States.* Journal of Medical Education (Chicago), 51(4), Apr 1976, 305-310. Engl.

Each of the 2 270 Iranian physicians listed by the American Medical Association as residing in the United States in 1973 was sent a questionnaire in which he was asked whether or not he intended to return to Iran, the reasons for not returning if he did not intend to return, and other questions concerning history and present status. A total 760 questionnaires were returned. The results indicated that age, level of training, marital status, and previous practice in Iran were all related to intention to return, although whether or not the physician had returned to Iran on a visit was not an important factor. The most frequently cited reasons for not returning were professional reasons, particularly lack of medical facilities and equipment in Iran. (Modified journal abstract.)

1977 Watkins, J.E. Papua New Guinea, Department of Public Health. *Nursing activity sampling study at selected hospitals and health units in Papua and New Guinea, Jul 1969-Apr 1970.* Konedobu, Papua New Guinea, Department of Public Health, 1969. 142p. Engl.

An example of how data can be collected and collated is provided by this sampling study of nursing activities in Papua New Guinea. Investigators employed nurses to observe staff in selected hospitals and health units and to record the activities they performed and the time required for each activity. The data were classified as basic nursing, technical nursing, administrative activities, domestic activities, and miscellaneous activities. Basic nursing included health teaching, caring for patients' hygiene, bedmaking, etc., whereas technical nursing comprised things such as draining and suturing wounds, catheterizing patients, testing urine, delivering

babies, etc. Administrative duties included record keeping and preparing staff reports, and domestic duties were cleaning, distributing food, laundering, etc. The miscellaneous category contained meal breaks, traveling times, etc. By tabulating the time spent in activities for each type of personnel, investigators obtained an overall picture of a hospital or health unit operation and could tell the amount of work performed at each shift. This information might be extrapolated to decide job descriptions or staffing requirements. Tables and job lists are presented. (AC)

1978 WHO, Geneva. UNICEF, New York. Assessment of UNICEF/WHO assisted education and training programmes. In Official Records of the World Health Organization, No.195, Geneva, WHO, 1971, 25-47. JC18/UNICEF-WHO/2. Engl.

UNICEF/WHO Joint Committee on Health Policy, Eighteenth Session, Geneva, 1-2 Feb 1971.

This broad assessment of UNICEF/WHO-assisted training programmes for health personnel was based on consultant visits to six WHO regions and nine countries. Observations made during these visits are set forth under the following headings: general background information, a description of the shared characteristics of the six regions and nine countries; policy and practice for the education of health personnel, including a discussion of national planning to this end; and a description of the categories of staff trained with UNICEF/WHO assistance in the form of supplies, equipment, and international staff. Observations are followed by some conclusions, particularly concerning the need to improve rural health services through the training of large numbers of auxiliaries and the need to persuade governments to formulate more realistic health plans. Finally, a list of 32 recommendations is proffered. The last of these expresses the need for expanded UNICEF/WHO assistance in the development and production of texts and teaching material in the respective national languages. A few intercountry and interregional activities in the fields of maternal child health, nursing, nutrition, and environmental sanitation are briefly considered in annex 1; a chart representing the basic characteristics of the countries visited constitutes annex 2. (HC)

V.2 Organization and Administration

See also: 1476, 1537, 1654, 1877, 1968, 1969, 2008, 2018

1979 Awan, A.H. Public Health Association of Pakistan, Lahore. *System of local health services in rural Pakistan and planned administrative and technical support.* Lahore, Public Health Association of Pakistan, 1969. 189p. Engl.

Before Pakistan introduced a fourth 5-year development plan, it supported this study into the prevalent health problems of the rural population and the system of health care delivery in the rural areas. The objectives were to set health priorities and to discover any counterproductive elements in the system. A sample of chairmen of Union Councils (local governments) was interviewed to determine their familiarity with health problems and their conceptions of their responsibility in health. It was found that the Union Councils did not feel obliged to promote any health activity except "environmental cleanup" and the shortage of sanitation staff made even this activity ineffective. Thus, infant and maternal mortality were high and communicable and parasitic diseases prevalent. Financial resources were so limited that no basic health service could be funded. Recommendations based on the study concern finances, personnel, and organization. Statistical data including distribution of health manpower, expenditures, mortality, and morbidity are tabulated, and the study's questionnaire, a classification of castes, and a summary of the Union Council health functions are appended. (AC)

1980 Barrow, R.N., Simmons, G. Christian Medical Commission, World Council of Churches, Geneva. *Survey of medical work in Bolivia, 3-17 Nov 1972.* Geneva, Christian Medical Commission, Nov 1972. 32p. Engl.

A Christian Medical Commission team has studied church medical services in Bolivia in order to evaluate their existing work and to help set new priorities, especially with respect to the needs of the poor, the overall financial constraints, and the need for close coordination with the development of government services. Methodist Church health facilities of three regions were visited — the modern hospital in La Paz; the hospital and health centres in the Altiplano; and the general hospital, children's hospital, and health posts of the subtropical eastern lowlands. In each case, there is a description of facilities and services, staffing, community involvement, training activities, and financing. The CMC team then outlined a series of proposals for improving the church's medical services, for example, by encouraging community participation, supporting under-fives' clinics, and training village health workers. The final section of the report tries to relate these proposals to the priorities of the Methodist Church in Bolivia. (MPM)

1981 Bennett, F.J., Lutwama, J.S. *Assessing the problems of a rural dispensary.* Central African Journal of Medicine (Salisbury, Rhodesia), 10, Nov 1964, 424-426. Engl.

Much of the medical work in rural areas of East Africa is performed in local dispensaries under the management of medical auxiliaries. The district medical officer, however, is unable to provide continuous supervision but a short checklist has been drawn up to help him assess the performance of the dispensary on initial and subsequent visits. The checklist is divided into 14 sections (e.g., situation of buildings, duties of personnel,

diagnostic criteria) each having a small list of points to note and questions to ask. The checklist is particularly useful during the medical officer's first visit as it will provide some insight into the particular problems of each dispensary. (MPM)

- 1982 Benyoussef, A., Wessen, A.F.** *Utilization of health services in developing countries: Tunisia.* Social Science and Medicine (Oxford), 8, 1974, 287-304. Engl. 10 refs.

A WHO study, which investigated utilization of government health services in a province of Tunisia, found that low and high use of facilities could be linked to rural/urban differences and certain other socioeconomic and demographic characteristics. Seven study areas, which reflected the overall health facilities in the province, were selected for investigation. A sample 678 households were surveyed and the inhabitants interviewed. The resulting information was linked with data from available (3 808 persons) medical records for years 1964-1968. Results indicated that 78% of the people were registered with the government health services and could avail themselves of medical care at no charge. At an average 2.74 visits a year, general utilization was low compared to that in most developed countries, and it was estimated that 42.9% of rural dwellers and 56.3% of urban dwellers would avail themselves of the services at some time. However, persons in urban areas who attended health facilities were likely to use them twice as often as persons living in rural areas. Poverty, educational status, and distance to services all affected the utilization of services. (AC)

- 1983 Carr, W., Wolfe, S.** *Unmet needs as sociomedical indicators.* International Journal of Health Services (Westport, Conn.), 6(3), 1976, 417-430. Engl. 20 refs.

This paper discusses a study of unmet needs undertaken by the Meharry Medical College (Nashville, Tennessee). It was designed to measure the effectiveness of alternative health care delivery systems: (a) comprehensive care with broad outreach, (b) comprehensive care with limited outreach, and (c) traditional care. Unmet needs are defined as the differences between services judged necessary to deal appropriately with health problems and services actually received. The central hypothesis is that comprehensive health programmes will be more effective than traditional care in reducing unmet needs. Unmet needs are viewed as measures of programme outcome and are one of several types of sociomedical indicators that use factors other than biomedical or biological states as measures of outcome. The distinction is made between unmet needs indicators and health status indicators. Various approaches to measuring unmet needs are discussed, and the relatively limited focus of these is contrasted with the more comprehensive Meharry approach. Household interviews and clinical examinations provide the data base for deriving professional judgments of unmet needs in the medical, dental, nursing, and social services areas. The Meharry work suggests several

areas in which further work on unmet needs would be useful. (Modified journal abstract.)

- 1984 Charles, L.J.** WHO, Brazzaville. *Role of health statistics, health laboratory and epidemiological services in integrated public health services.* In An Integrated Concept of the Public Health Services in the African Region, Brazzaville, WHO African Technical Papers No.2, 1970, 57-75. Engl. See also entry 901 (volume 2).

In 1969, a study of health statistics, laboratory, and epidemiologic services in Africa indicated that modifications in these services were required if they were to be effective tools in disease control. Questionnaires on health statistics services were sent to 26 governments, and the 18 replies showed that only 13 operated such services, while 17 at least required deaths to be reported. Results suggested a lack in facilities at the periphery for reporting statistics, inadequate numbers of persons educated enough to understand the international classification of diseases, the presence of complex systems without feedback, and the existence of uncooperative attitudes among health personnel. Remedies include offering training courses for personnel; developing a short, simple classification system for diseases; and establishing (or strengthening present) national services. Data for laboratory services for 25 countries indicated that all had rudimentary microbiology and serology, and more than half also undertook investigations in entomology, sanitary bacteriology, epidemiology, and research. Distribution of standardized reagents and prophylactic material from a central source was not practiced extensively and was needed. Although 14 of 25 countries had epidemiologic services, staff needed to be upgraded through courses, etc., and methods to exploit material needed to be examined. Statistical data are tabulated. (AC)

- 1985 Gauldfelt, F.I., Gangloff, L.** USA, Department of Health, Education, and Welfare. *Syncretism: the dynamics of health. VII. Liberia.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS) 74-5003, Nov 1973. 56p. Engl. Refs.

See also entries 1342, 1343, 1353, 1354, 1355 (volume 2), 1987, 1991, and 2002.

Volume seven in a series of studies sponsored by the U.S. Agency for International Development examines the relationship between health and development in Liberia. At present, 85% of Liberia's modest health budget is devoted to curative medicine, although preventive medicine would be a much more effective way of approaching the health problems of the country. Few existing health services are adequately utilized, perhaps due to the transportation difficulties and cultural biases. Malnutrition, caused largely by ignorance and superstition rather than poverty, could be greatly alleviated by improved farming methods, better transportation and refrigeration, and intensive health education. Other areas of concern are environmental sanitation and the extremely rapid population explosion. Priority should be given to the incorporation of native

practitioners of traditional medicine into the health care delivery system as medical auxiliaries. On a professional level, the majority of students at the University of Liberia Medical School are foreigners, whereas most Liberian doctors are educated abroad at government expense and receive minimal training in tropical medicine. Supplying drugs and equipment to outlying hospitals and health centres seems to be a national problem. Liberia's progress should not be judged by the situation in Monrovia but by the standards of the remaining 90% of the population, who are just emerging into the twentieth century. Statistical data are included. (RD)

1986 Goodman, N.M. *Health services in Afghanistan*. Lancet (London), 6 Mar 1965, 544-545. Engl.

The author, who visited Afghanistan to establish priorities for British foreign medical aid, examines the country's health status, including its present health system. He cites administrative weakness in the Ministry of Health as a major problem, which prevents the ministry from coordinating its services with those provided by other government departments, foreign countries, and international agencies. The result is duplication — a waste of facilities and manpower — the effects of which are compounded by shortage of paramedical workers and inappropriate training for physicians. At present, doctors are charged with administrative responsibilities, and their medical education, which may not be in their own language, has not properly prepared them for their duties. Preventive medicine is almost ignored; communicable diseases flourish as a consequence of the lack of sanitation and water treatment, and infant mortality is high. Solutions to these problems are complicated by the lack of morbidity and mortality data and the existence of cultural prejudices. (ES)

1987 Holland, B., Davis, J., Gangloff, L. USA, Department of Health, Education, and Welfare. *Syncretism: the dynamics of health. XI. Nicaragua*. Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS) 74-50007, Nov 1973. 106p. Engl. Refs.

See also entries 1342, 1343, 1353, 1354, 1355 (volume 2), 1985, 1991, and 2002.

In the series sponsored by the U.S. Agency for International Development, the 11th volume examines the development of health care services in Nicaragua as influenced by socioeconomic and political factors. Health problems approximate those of other developing countries, although no reliable statistical data have been collected by the government. This lack of baseline data makes sound conclusions and future plans difficult, and poor administrative organization affects the use of existing medical facilities, hampers immunization and family planning programmes, and retards the growth of medical student enrollment. The population's basic mistrust of modern medical practice and ignorance of good hygiene, combined with malnutrition and poor sanitation, result in a high proportion of preventable communicable diseases, especially fatal to infants. And expenses incurred by the earthquake of

1972 have retarded the development of health services throughout the country. Recommended reforms include the effective use of existing facilities; the training of paraprofessionals to provide more immediate care to outlying districts; implementation of family planning, immunization, and health care programmes; introduction of legislation to arrest the growth of industrial accidents, to control prostitution with its spread of venereal disease, and to control food hygiene; and a stress on the importance of nutrition programmes as effective combatants of disease. (ES)

1988 Johnson, R.H. *Health of Israel*. Lancet (London), 23 Oct 1965, 842-845. Engl. 17 refs.

Since 1948, Israel has successfully created health services to deal with its rapid population growth — due largely to immigration — and has thus earned recognition from the World Health Organization. It has evolved a system that comprises three aspects: government services, union-sponsored services, and voluntary health agencies. The Ministry of Health administers public health clinics and preventive services throughout the country and subsidizes hospital deliveries to cut down infant mortality. The Federation of Labour sponsors a national health insurance scheme for clinics and hospitals providing curative care, and other similar schemes are available for those with private means. Voluntary organizations run related services, such as blood banks and emergency transport. One such organization, Hadassah (USA), built and donated a network of mother and child care clinics and provided the country's only teaching hospital. This hospital emphasizes general practice and social medicine in an effort to encourage doctors to settle in rural areas. Although Israel has a disproportionately high number of doctors to population, training and quality of service vary widely, and food hygiene and mental health are still inadequately treated. (ES)

1989 Journal of the American Medical Association, Chicago. *Health in Upper Volta*. Journal of the American Medical Association (Chicago), 196(7), 16 May 1966, 166. Engl.

The health services in Upper Volta, which include hospitals, health centres, dispensaries, and mobile units, serve one of the most densely populated states in Africa. The system is devised so that no patient is more than 25 km from a dispensary, and an emphasis has been put on mass immunization programmes, maternal and child health care, and supervision of public hygiene and sanitation. However, leprosy, tuberculosis, and onchocerciasis remain widespread, and, because there are no medical schools in the country, a large number of foreign aid medical personnel staff the services. Nurses and medical assistants are trained in two nursing schools (one privately owned) and a medical assistants school. (ES)

1990 Khanna, S. Pan American Health Organization, Washington, D.C. *Family planning as part of basic health services in the Caribbean region*. In Nursing and Midwifery in Health and

Population Dynamics, Washington, D.C., Pan American Health Organization, Scientific Publication No. PD/S1, 1970, 35-42. Engl.

See also entry 1848.

In the Caribbean region, family planning services are government sponsored in some countries, but in others they are available through voluntary agencies or not organized at all. The services are being integrated into the general health services in Trinidad and Tobago, Jamaica, Bermuda, the Dominican Republic, and Puerto Rico. But in countries where voluntary agencies are responsible, they are gradually being extended into the health services where government support and recognition exist, e.g., in Barbados and St. Vincent. In the discussion, it is indicated that irrespective of the demographic situation, family planning as part of a comprehensive health programme is desirable in all areas. Further, provision of medical consultation and service, and education toward family planning, need development and integration within the health services; and manpower needs argue against duplication of resources.

1991 Lashman, K.E., Daly, J.A. USA, Department of Health, Education, and Welfare. *Syncretism: the dynamics of health. IX. Dominican Republic*. Washington, D.C., U.S. Government Printing Office, DHEW Publication No. (OS) 74-50005, Jun 1974. 151p. Engl. Refs.

See also entries 1342, 1343, 1353, 1354, 1355 (volume 2), 1985, 1987, and 2002.

The socioeconomic factors affecting health care in the Dominican Republic are the subject of the ninth study sponsored by the U.S. Agency for International Development. Significant among the usual problems of developing countries (i.e., malnutrition, high infant mortality, high incidence of communicable diseases, lack of sanitation) is the extremely high population growth of 3% annually, coupled with a concentration of population in overcrowded cities. Family planning programmes have been restricted by the opposition of the Catholic church, by the people's belief that children are "God-given" and are signs of virility, and by opposition within the medical profession itself. The lack of cooperation and coordination of programmes and facilities sponsored by foreign aid agencies and indigenous public and private bodies further limits their effectiveness. Administrative inefficiency hampers the operation of existing hospitals, clinics, and laboratories and results in poor utilization. More paraprofessionals are needed and should be encouraged to work in rural areas. Primary recommendations for change include extending preventive as well as curative health care to mothers and children, increasing family planning and nutritional programmes, and reorganizing the administrative and health manpower structures. (ES)

1992 Liebowitz, M. *Cuban health care system: a study in the evaluation of health care systems*. New Haven, Conn., Yale University School of Medicine, Jun 1969. 119p. Engl. Refs.
Doctoral dissertation.

This paper proposes to contribute to health care system organization primarily through the aspect of evaluation; to that end, it has several objectives. The first is to provide information about the organization and administration of a relatively unknown but highly novel health care system, that of the Republic of Cuba. The second objective is to critically evaluate this system (in terms of progress toward its goals, and by comparison with prerevolutionary services and with existing services in other countries), and in the light of this evaluation to see what may be useful or generalizable to other countries. The third objective is to explore the difficulties of health system evaluation; specifically, to critically study commonly held ideals and standards of health care organization (accessibility, adaptability, appropriateness, etc.) and to analyze them in light of the Cuban experience. (Modified author's introduction.)

1993 Mitra, S.K. *Present day health organization in Sikkim*. Indian Journal of Public Health (Calcutta), 13(1), Jan 1969, 3-9. Engl.

This survey shows that health services are spread very thinly across the mountainous state of Sikkim in India. As there is only a handful of doctors, and even fewer trained nurses, much of the basic health care is provided by dais and "compounders." This is especially so in the rural areas, where compounders are placed in charge of local dispensaries. The dispensary usually doubles as the compounder's residence, and from here he is responsible for providing health services to perhaps 7 000 people. The services include simple medical care, health education, home isolation of infectious diseases, and immunizations. On the whole, health services in Sikkim are quite inadequate; programmes to improve sanitation, water supplies, school health, and maternal and child health are only at the rudimentary stage. The health problems are illustrated by seven tables of data on mortality, prevalence of disease, utilization of services, numbers and distribution of staff, and financial resources. (MPM)

1994 National Academy of Sciences, Washington, D.C. National Research Council, Washington, D.C. *Public health problems in 14 French-speaking countries in Africa and Madagascar: a survey of resources and needs*. Washington, D.C., National Academy of Sciences, Division of Medical Sciences, 1966. 389p. Engl.

A study undertaken in 1962 resulted in these two volumes on the major health problems in Madagascar and French-speaking Africa. The findings of the study are broken down into sections on organizations and programmes, major health problems, and individual countries. The first section contains information on general financial assistance and resources as well as common health services and organizations. The second section reviews communicable diseases, water supplies, and health manpower training. The final section, which constitutes the second volume, sets forth statistical data on demography, economic resources, national budget, assistance programmes, organization of health services,

public health programmes, and training for the 15 countries investigated. (AC)

- 1995 Neumann, A.K., Sai, F.T., Dodu, S.R.** *Danfa comprehensive rural health and family planning project: Ghana.* Environmental Child Health (London), Feb 1974, 40-54. Engl.

After 4 years of operation, the Danfa project (Ghana) reports substantial progress toward its objectives of investigating the physical, social, cultural, health, and economic characteristics of the rural Ghanaians; researching the most useful and efficient way of utilizing available manpower for health and family planning services; and creating an infrastructure suitable in terms of cost and manpower for wider application in Ghana. Surveys on morbidity, fertility, maternal health practices, child health practices, and knowledge, attitudes, and practices about family planning for both women and men have been undertaken. Different combinations of services have been introduced in four villages. Although all villages have the basic Ministry of Health Services, occupants in Area I have access to comprehensive services including diagnostic and curative care; community health education; sanitation; nutrition education; prenatal, delivery, and postnatal care; immunization; and family planning services. Those in Area II have access to community health education and family planning services. Those in Area III have access to family planning services, and those in Area IV only to the basic ministry services. Although it is too early to evaluate the effects of the services on morbidity and mortality, offshoots include training programmes, a manual of personnel job descriptions, and the identification of 250 traditional birth attendants for possible upgrading. (AC)

- 1996 Ramchandran, L., ed(s).** *Developing indices for evaluation of health service.* Indian Journal of Public Health (Calcutta), 11(1), Jan 1967, 32-34. Engl.

See also entry 1426.

The validity of present health indicators and data-gathering techniques is questioned in this summary of a workshop held during a conference on public health in India. Statistical indicators, such as mortality or morbidity, are misleading because they may reflect changes that have not directly resulted from health services or programmes, but rather, have resulted from improved communications, social and economic progress, etc. In addition, fluctuations in figures may reflect changes in the degree and amount of information collected, and not in the level of health. The following are recommended for future evaluation of health services: that presently used statistical indicators be refined to make them more revealing; that the different components of each programme be evaluated according to the objectives of each, as opposed to the ultimate objectives of the programme as a whole; that sampling techniques instead of general mortality and morbidity be used as a basis for epidemiology; and that evaluation techniques be kept simple, so that they can be used by lower-level field workers. (HC)

- 1997 Roy, A.K.** *Records maintenance in health centres: a study based on a practice field.* Calcutta Medical Journal (Calcutta), 67, 12 Dec 1970, 419-429. Engl. 9 refs.

In 1968-1969, a study was undertaken in India to evaluate health record and register maintenance in four health centres. Health records/registers were itemized, scrutinized, and evaluated according to their usefulness in training, service, and evaluation (epidemiology). Differences in classification and management of records and registers were noted in the four facilities, and a need for streamlining was evident in all. In addition, some records were not accurately completed, indicating the need for occasional supervision. It was concluded that one system of record classification and maintenance should be devised and implemented in all health facilities and that one central control register should be established to replace registers within each health centre. An example of a central control register form is given in Appendix B. (HC)

- 1998 Schulpen, T.W.** African Medical and Research Foundation, Nairobi. *Integration of church and government medical services in Tanzania: effects at district level.* Nairobi, African Medical and Research Foundation, 1975. 301p. Engl. Refs.

Churches and government in Tanzania have cooperated in an innovative programme to make free health services more widely available to rural peoples. By pooling their funds, manpower, and facilities they have been able to operate nine district hospitals more effectively. A comparison of services offered by church, integrated (church and government), and government hospitals indicated that the best quality care was found in church hospitals but that the greatest amount of community-oriented care was offered by the integrated hospitals. The services of integrated hospitals extended outside their own walls into the community and provided care for a much larger audience than did the other two types. A case study of one hospital (Biharamulo) provides a model for integration, which may prove suitable to other developing countries that depend on mission health services for the bulk of rural health care. (AC)

- 1999 van Etten, G.M.** *Rural health in Tanzania.* Assen, The Netherlands, Van Gorcum and Co., 1976. 188p. Engl. 180 refs.

Whereas past social sciences research in developing countries, such as Tanzania, has charged rural populations with responsibility for lack of development, the studies presented in this document indicate that the development system itself may be responsible. One such study in Mwanza region compared health service utilization data with earlier studies, most of which had focused on characteristics of the population and not of the health care delivery system. In this study, outpatients attending seven hospitals and members within 31 households of a rural community were interviewed and asked about use not only of modern medical facilities

but also of traditional practitioners and of self-medication. Data were analyzed according to geographical and financial accessibility, demographic characteristics of the population, and morbidity. Results showed that geographical accessibility was among the primary determinants of utilization; that a people's level of education and religious affiliations did not influence their choice of a particular type of modern health facility; and that spending on treatment was highest for traditional practitioners. Another study, which investigated the attitudes and practices of medical auxiliaries (rural medical aids and medical assistants), indicated that the shift in government policy from curative to preventive care had served only to relocate health workers from hospitals to health centres and had not affected their attitudes. Recommendations based on these studies are presented, and statistical data on distribution and utilization of health facilities are tabulated. Appended are the interview schedules used in the surveys. (AC)

- 2000 Vogel, L.C., Sjoerdsma, A.C., Swinkels, W.** *Workstudy in medical services.* Tropical Doctor (London), 5(4), Oct 1975, 184-186. Engl.

Although modern management techniques have been applied successfully to health services in areas such as resource utilization and overall organization, most are too sophisticated to be relevant to the isolated doctor in a "bush" hospital. Work study, however, is one management technique that is appropriate. It can be used to investigate the factors affecting the efficiency and economy of health activities, especially large-scale operations or repetitive work. The basic procedure is to record everything that happens in the job or process under study. A critical examination of this record should indicate the areas where improvements might be made by measures such as eliminating or combining services, standardizing activities, and delegating work to less-qualified staff. The authors caution, however, that the interests of the patients must be thoroughly considered before any changes are introduced — what may seem an improvement to the doctor may present new problems to the patient and even prove unacceptable to the community. (MPM)

- 2001 Wilenski, P.** International Development Research Centre, Ottawa. *Delivery of health services in the People's Republic of China.* Ottawa, International Development Research Centre, 1976. 59p. IDRC/056e. Engl. 199 refs.

Since early 1950, unlike most developing countries, the People's Republic of China has linked health care with production, has integrated health education into the political and social culture, and has urged economically sound methods of health care delivery. The earliest national health planning was based on the principles of serving the workers, peasants, and soldiers; emphasizing prevention instead of cure; engendering cooperation between Western-trained and traditional medical practitioners; and mobilizing the masses to carry out health measures. Although the government itself has experienced periods of professional elitism, it has at least recognized the need for alternative health delivery

systems aimed at rural populations and has successfully implemented them. Mass campaigns, the training and deployment of barefoot doctors, the medical cooperatives, and the merging of traditional and Western medicine are the most notable. The Chinese experience is based on a highly organized political framework and on the mandate to serve the people; therefore, the extent to which it is directly transferable to another country may be limited. Nevertheless, it exemplifies a practical and successful attempt to meet the health needs of a developing country. (AC)

- 2002 Woolley, P.O.** USA, Department of Health, Education, and Welfare. *Syncretism: the dynamics of health. XII. Thailand.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS) 74-50008, Jun 1974. 139p. Engl. Refs. See also entries 1342, 1343, 1353, 1354, 1355 (volume 2), 1985, 1987, and 1991.

Volume XII in the series sponsored by the U.S. Agency for International Development analyzes the relationship between sociocultural factors and the development of health care services in Thailand. Four major areas of health concern are identified: the rapid population growth combined with increased urbanization; sanitation and environmental hazards; malnutrition; and the inadequacy and low utilization of existing health care resources. Despite massive foreign aid, preventable infectious diseases cause 80% of illnesses and 40% of deaths. Existing health care services and money allocations are concentrated in Bangkok with a drastic shortage of trained manpower and facilities in outlying districts. Although increases in financial allocation in the training of paraprofessional personnel and in the quality and quantity of district health care centres would improve the situation, the basic problem is the attitudes, values, and beliefs of the predominantly Buddhist rural population. Change and improvement are possible with a coordinated educational policy directed at all levels of society and aimed at creating community involvement in the upgrading of sanitation, nutrition, and health care. (ES)

- 2003 Yen, Y.T.** *Operational functions at health stations in Taiwan.* Journal of the Formosan Medical Association (Taipei), 70(6), 28 Jun 1971, 319-327. Engl.

Medical students in Taiwan undertook a study of activities in 13 health stations and discovered that 38.7% of staff time was devoted to personal functions, 30.6% to administration, and 30.7% in health care delivery. Six urban, six rural, and one aboriginal health stations were observed during July 1967, and functional profiles were drawn up for all staff members. Time spent in each activity was recorded; daily summaries were totaled at the end of each week and these in turn were summarized biweekly, and finally, monthly. The time spent in health care delivery was split fairly equally between clinic and community activities. Although times devoted to particular clinic activities varied widely, curative care averaged 40% of clinic activity; physical examinations 34%; maternal child health 10%;

and tuberculosis 8%. Community activities were concentrated in home visiting (61%) and immunization drives (22%). Environmental sanitation accounted for 7% of time; health education 3%; industrial health 5%; and school health 2%. Statistical data and recommendations are presented. (AC)

V.3 Planning

See also: 1877, 1985, 1987, 1991, 2002, 2020, 2039

- 2004** Amini, F., Jaksic, Z., Khosrowshahi, A. *Approach to health services development research in Iran*. Iranian Journal of Public Health (Teheran), 2(4), Feb 1974, 219-236. Engl. 18 refs.

The Health Services Development Research Project in Iran was established in 1971 to determine the shortcomings of existing health services and to devise means of overcoming them through the development of a co-ordinated national health care delivery system. The report outlines the sequence of steps involved in such a project: the initial surveys of health status, medical services, and socioeconomic conditions; consideration of alternative ways of developing the services (types, quantities, staff); implementation of proposals; and their subsequent evaluation. These steps are applied to the survey results obtained during field observations in the project, and a plan for reorganizing the structure of primary health care is evolved. The authors recommend that researchers examine health systems comprehensively (e.g., mass campaigns/individual care, government services/private schemes, etc.), use existing services as the point of departure for modifications, and aim at providing the type and quantity of coverage as required by the population and not as conceived by "professional pressure groups." (MPM)

- 2005** Barlow, R. *Applications of a health planning model in Morocco*. International Journal of Health Services (Westport, Conn.), 6(1), 1976, 103-122. Engl. 16 refs.

Health spending should support the objectives of health services (output maximization); however, it often aims to satisfy norms, such as physician-to-population ratios (input norms). Input norms have not been linked directly to the health sector's purposes, which are reduction of mortality, reduction of morbidity, economic improvement, and palliative care, and thus cannot be evaluated according to them. Output maximization, on the other hand, is built on weighted combinations of them and therefore can be measured against those combinations. A model using output maximization is set forth for Morocco; in it, the author applies this form of cost-benefit analysis to hospitalization and vaccination programmes and suggests similar investigations for health planning. Statistical data are presented in a series of tables, and the model is graphically illustrated. (AC)

- 2006** Chasse, J.D. *Bayesian approach to health project estimation*. American Journal of Public Health (New York), 66(8), Aug 1976, 747-754. Engl.

Bayesian statistical techniques, which have been applied in this article to estimate the impact of a change in India's TB programme, are flexible enough to accommodate expert opinion and statistical data. They are measurements of medical outcomes for which the probabilities of action have been calculated from medical records, medical research, and expert opinion. Thus, the techniques link patient outcomes with health programmes. They are applied to determining the effect both of introducing a programme and upholding the status quo. Then, the results can be compared and a rational decision can be made before moneys are invested. For example, in India's TB programme, this meant calculating the probabilities for the ideal outcome, i.e., (1) a patient who is suffering from TB is discovered; (2) he continues treatment; and (3) he is cured. The mathematical procedures for calculating probabilities are set forth, and a model decision tree is included. (AC)

- 2007** Duarte de Araujo, J. *Appraisal of the health planning method proposed by the Pan American Health Organization for Latin America*. Revista de Saude Publica (Sao Paulo), 6, Dec 1972, 305-315. Engl.

The CENDES (Centro de Estudios del Desarrollo, Venezuela) health planning method is described, appraised, and analyzed; some indications of its future potential as a planning tool are pointed out. The method, first published by PAHO in 1965 and widely applied in Latin America since, stresses problem-solving; its positive aspects include its logic, simplicity, ecologic approach, efficacy and efficiency, etc. Its shortcomings include its lack of provision for local, regional, or national participation in defining goals, and its emphasis on disease and prevention of death, which overlooks such activities as health education and maternal and child health. It also fails to discuss the composition and authority of planning bodies, to emphasize the importance of health to development, and to define methods for evaluation. Progress toward correcting these shortcomings, however, is indicated in some recent WHO/PAHO publications. These are briefly discussed, and the author concludes that the future potential of the CENDES method will depend upon the ability of its users to evaluate and revise it in the light of developments in the field of health planning. (HC)

- 2008** Gabaldon, A. *Health services and socioeconomic development in Latin America*. Lancet (London), 12 Apr 1969, 739-744. Engl.

The development of health services in Latin America has been modeled on that of more industrialized countries; however, the quality and quantity of medical problems are far different in the two cases. This must be recognized by the medical profession, planners, and governments if future plans are to be effective. Problems affecting the quality of life in Latin America are

the prevalence of debilitating infectious diseases; high child mortality; resistance to long-term public health measures in favour of hospital-building and individual curative care; the lack of health education for the public and medical personnel; the ignorance of proper nutrition with resulting debility and susceptibility to diseases; and, finally, the lack of accurate data on which to base conclusions and plans. These are complicated by expanding economies, high population growth rates, and the numbers of foreign advisers who are unaware of Latin America's problems. Recommended changes are to expand public health and preventive health measures that will improve the quality of life for the whole population and to improve education facilities for both the public and medical personnel. But the greatest need is for governments to reassess their health care systems, budget them to balance with other socioeconomic demands, and administer them more effectively through a close-knit bureaucracy oriented toward public health. (ES)

- 2009 Venezuela, Ministry of Health and Social Welfare.** *Republica de Venezuela, Ministerio de Sanidad y Asistencia Social: memoria y cuenta ano 1973. (Republic of Venezuela, Ministry of Health and Social Welfare: annual report 1973).* Caracas, Ministry of Health and Social Welfare, 1973. 556p. Span.

All activities carried out by each administrative division of the Ministry of Health and Social Welfare, Venezuela, during the year 1973 are set forth in this comprehensive report. For the purposes of this bibliography, the following are of particular interest: the number of rural communities that received pure water supplies in 1973; the status of Venezuela's programme of simplified medicine for rural areas; advances in infectious disease control — yellow fever, malaria, schistosomiasis, and other endemic and parasitic diseases; and projected numbers of manpower — professional and auxiliary — and their training, for the year 1974. A considerable amount of statistical data is supplied. (HC)

V.4 Geographic Distribution of Health Services

See also: 1481, 1503, 1742, 1877, 1974, 1979, 1982, 1985, 1987, 1991, 1999, 2002, 2051, 2061

- 2010 Burton, J.H.** *Problems of child health in a Peruvian shanty town.* Tropical Doctor (London), 6(2), Apr 1976, 81-83. Engl. 10 refs.

The basic child health problems in shanty towns, such as Villa el Salvador, Peru, compare to those prevalent in rural areas. Protein-calorie malnutrition and infectious diseases are widespread, and because of the lack of sewage disposal and running water, many children also suffer from parasitism. Expenditures in public health

are concentrated in curative medicine, and the more affluent urban dweller benefits from the maldistribution of health manpower. Health education is almost nonexistent, and where it does exist, it has not been adapted to the social and cultural milieu of Peruvians. Often health professionals encourage early weaning, and posters promoting nutrition proclaim the importance of meat in the diet, whereas beans are a less expensive source for protein and are culturally acceptable. (AC)

- 2011 Kimmance, K.J.** *Evaluation of the work of a mobile outpatient unit in Swaziland.* Journal of Tropical Pediatrics (London), 16, Jun 1970, 62-67. Engl.

The impact of a fortnightly mobile unit, which brought outpatient treatment, prophylaxis, and health education to a sparsely populated area of Swaziland, was assessed through two surveys conducted 18 months and 2 1/2 years after the service was inaugurated. Surveys, which were limited to the under-fives' population within a 5-mile radius of the clinic, sought to determine to what extent the population used the medical facilities; the state of under-fives' immunization; and the effect of distance on attendance. Every home was visited, and a questionnaire filled out for each child under age 5; answers to the questionnaire were issued to all clinic attenders. The following observations were made: 85% of the children had been taken to a medical facility at least once during their lives; 50% of the under-fives had attended the mobile clinic during the first 18 months of operation, and 65% during the first 2 1/2 years; the unit was almost alone in providing the population with immunization; and the numbers of attenders tended to fall off at a distance of 3 miles. It is concluded that the distance factor, rather than poor motivation, deters people from seeking medical care for their children. While the mobile unit is a good method of bringing services within reach of the people, its high cost makes early evaluation of the scheme desirable. (HC)

- 2012 Kreysler, J.** *Rational development of an "under-fives" clinic" network.* Journal of Tropical Pediatrics (London), 16, Jun 1970, 48-52. Engl.

The effectiveness of an under-fives' clinic in preventive medicine was evaluated in the Bumbuli division of Lushoto District, Tanzania, where an estimated 8 000 under-fives suffer from protein-calorie malnutrition. The clinic was set up in 1967 as part of the Bumbuli hospital complex. Children were given food supplements if underweight, treated for minor diseases, and vaccinated. Records showed that in the first 7 months, only 360 or 5% of the children of the division were registered at the clinic and that 80% of those registered lived within a radius of 8 miles of the clinic. Intensive propaganda in two villages 7 1/2 and 9 1/2 miles away did not seem to have any appreciable influence on these villages' attendance rates — regular attenders remained those within a 4 1/2-mile radius. From this it was concluded that clinic proximity rather than intensive preparation is the determining factor in clinic attendance and

that the optimum distance of one clinic to another is 7 miles, such that no child need be more than 4 1/2 miles away from a child health facility. (HC)

- 2013 Pan American Health Organization, Santiago.** *Tipologías: documento preliminar preparado por la División de Investigaciones. (Typologies: working paper prepared by the Research Division).* Santiago, Pan American Health Organization, Mar 1972. 42p. Span.

Two methodologies for estimating a country's development in its economic and health sectors are developed and applied to Latin America. Each methodology consists of applying a mathematical formula to a number of indicators (e.g., life expectancy at birth, gross domestic product per head, etc.) to determine health and development "factors" on which to base a comparison. Those countries exhibiting similar "factors" are grouped together into one of four broad groups, and their characteristics are set forth in tables. Although the methodology may or may not be of interest to the reader, the paper is notable for the recent (1972) data concerning vital statistics, demography, education, economic development, and health standards it contains. (HC)

- 2014 Roy, A.K., Viswanathan, K.S., Bose, S.K., Mondal, S.K.** *Comparative study of medical and health care in a rural area (Nasibpur Union) in West Bengal.* Indian Journal of Public Health (Calcutta), 4(3), Jul 1960, 134-145. Engl.

A study comparing the utilization of a government health centre with the use of other available health facilities in Nasibpur Union, India, found that the health centre provided approximately 40% of health care. The health centre, which comprises a 12-bed hospital, offered integrated health care free of charge to the residents of the union. Other nearby sources of health care included private practitioners, neighbouring health centres of the government of West Bengal, and two subdivisional hospitals of 115 and 76 beds. An analysis of records of hospital admissions in each service during a 1-year period and data on past illnesses, gleaned through interviews, revealed that the union centre was indeed the people's first choice, although the percentage of users tended to vary inversely with their distance from it. On the average, 40% of all cases in Nasibpur were treated by health centre staff, 34% by local practitioners, and the remaining 26% by the other agencies. The methodology and interviewing schedules are described in detail; statistical data gathered are set forth in six tables and four figures. (HC)

- 2015 Shakaya, K.** *Present situation of rural medicine.* In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 42-43. Engl.
First Asian Congress of Rural Medicine, Usuda,

Japan, 24-27 Oct 1973.

See entry 1519 for complete proceedings.

This status report on medical care in Nepal provides information on the numbers and distribution of health personnel and facilities. The professional health manpower totals 180 graduate nurses and about 367 doctors, of whom 50 are foreign. (There are two nurse training schools in Nepal, but no medical colleges.) Fifty-seven hospitals, 6 zonal health offices, 36 health centres, and 193 health posts provide a total of 2 036 beds, 1000 of which are in the capital city. For the overall population (11 289 000), this means a ratio of 1 bed for nearly 5 545 people; in Kathmandu Valley there is 1 per 586 people, whereas in other parts the ratio decreases to 1 bed for 10 331 people. In view of the limited health services and the difficulty of transportation, many Nepalese living in remote villages lack access to any medical care. On the other hand, many diseases, such as leprosy, smallpox, and tuberculosis, are still common in these rural areas, and consequently several vaccination programmes have been initiated. The other major focus of health services in Nepal is maternal and child health, including family planning, and 41 clinics have already opened across the country. (MPM)

- 2016 WHO, Brazzaville.** *Contribution to studies on African health demography: medical and paramedical staff.* Brazzaville, WHO, 1 Dec 1970. 1v.(various pagings). WHO/AFR/EU/3. Engl.
See also entry 492 (volume 1).

The results of a survey undertaken in 1969 by WHO and African national governments underline the severity of health manpower shortages and maldistribution. A questionnaire, which aimed to determine the numbers of health personnel in 22 different cadres, was used for data collection in 31 countries. WHO staff members aided national authorities in completing questionnaires, and 75% of responses were returned before the cutoff date. Only four countries reported a physician-to-population ratio better than 1:10 000, and when the physicians practicing in the capital cities were excluded from calculations, the number of countries dwindled to one, while eight countries had fewer than 1 per 100 000 population. Although information on health personnel practicing in the private sector was less complete, their contribution in number was quite considerable. Recommendations resulting from the survey include follow-up surveys every 2 years and use of the statistics for health manpower planning. Statistical data and a questionnaire are appended. (AC)

V.5 Financial Aspects

See also: 1503, 1877, 1974, 1985, 1987, 1991, 1995, 1999, 2002

- 2017 Vogel, L.C., W'Oigo, H.O., Swinkels, W.J., Sjoerdsma, A.C.** *Cost analysis of out-patient ser-*

ices at Kiambu district hospital, Kenya. *East African Medical Journal* (Nairobi), 53(4), Apr 1976, 236-243. Engl.

An analysis of the costs and services of an outpatient department (Government Hospital) in Kiambu, Kenya, indicated that the cost per patient-visit was high and that savings might be effected through an examination of labour and prescribing habits. The study was undertaken by the Netherlands Project for Operations Research in Out-patient Service, which aims at promoting efficient operations and decreasing cost per unit of service of outpatient departments. For 4 days, the study group investigated the services and categorized its observations into labour, material, and overhead costs; services rendered; and costs per unit of service. Although labour costs proved reasonable at 54% of total costs, they varied widely between units. X-ray and laboratory procedures were high as were costs within the pharmacy. It was noted that few patients left the department with only one drug or one treatment. The staffing patterns are set forth, and statistical data are tabulated. (AC)

V.6 Cultural Aspects

See also: 1982, 1985, 1987, 1991, 1995, 1999, 2002, 2008, 2036, 2085, 2088

2018 Banerji, D. *Health behaviour of rural populations: impact of rural health services.* Economic and Political Weekly (Bombay), 8(51), 22 Dec 1973, 2261-2268. Engl.

The influence of India's primary health centres (PHCs) on the health behaviour of the rural population was investigated by means of an in-depth study of 13 village PHCs, which had transportation links and political awareness much above the average, in four different regions. The investigators lived in the villages for 3-5 months and observed and interviewed representatives of all segments of the community. In addition, they questioned personnel from the PHCs and officials from the state health directorates about rural health behaviour and the organization and management of rural health services. Salient findings included the following: people from all socioeconomic backgrounds preferred Western medicine to empirical medicine but its availability and cost constituted major drawbacks; the PHCs projected an unflattering image due to discrimination against the poor, lack of medicines, overcrowding, nepotism, bribery, and indifferent or rude behaviour on the part of the staff; despite a recognized need for contraception, the rural population viewed the family planning programme with "strong antipathy" because of the coercive methods, unsatisfactory follow-up, and single-purpose approach, and often resorted to abortion as an alternative. The author concludes that there

is a need for all types of health and family planning services and that there is a considerable unused capacity in the existing health services. Findings are attributed to the gap between rich and poor and the elitism of the present political system. Some recommendations, mostly of an administrative nature, for long-term and immediate action, are made. (HC)

2019 Bennett, F.J., Saxton, G.A., Junod, V. *Family structure and health at Kasangati.* Social Science and Medicine (Oxford), 2, 1968, 261-282. Engl.

An investigation into the structure and health of families served by Kasangati Health Centre (Uganda) revealed a varied social and cultural picture. The study population included 104 Ganda and 12 non-Ganda families, and the common units were monogamous families, polygamous families, and groups that consisted of adults and related or unrelated children. In general, children were found to be particularly mobile, often being separated at an early age from either father or mother. The effects in malnutrition were obvious, but emotional effects were less so. At adolescence, children were allowed to choose where they wished to stay. Many fathers commuted to nearby Kampala for employment and spent little time with their families, and most mothers were engaged in producing children and cultivating small gardens. Household hygiene was remiss, but personal cleanliness proved somewhat more satisfactory. Pit latrines were available but not consistently used, and parasitism was widespread. (AC)

2020 Benyoussef, A., Cutler, J.L., Levine, A., Mansourian, P., Phan-Tan, T., Baylet, R., Collomb, H., Diop, S., Lacombe, B., Ravel, J., Vaugelade, J., Diebold, G. *Health effects of rural-urban migration in developing countries: Senegal.* Social Science and Medicine (Oxford), 8, 1974, 243-254. Engl. 19 refs.

This study examines the health effects of rural-urban migration in Senegal and tests theories and methodologies for future, large-scale plans. By comparing data based on a survey of 235 rural residents and 234 urban migrants of the same tribe, the study discusses the effects of migration on sociodemographic, biomedical and mental health, and housing and hygiene. Questionnaires, medical and psychiatric interviews, and medical tests were the source of these data, which indicate that urbanization and acculturation had profound effects on the social habits and living conditions of migrants. However, they also reveal that the health status of rural and urban inhabitants was similar. Investigators attributed this last finding to the small number of people sampled, but they recommend research into the causes of the high incidence of anaemia and schistosomiasis in both rural and urban areas and into the health problems of young, single women, caused by their inability to adapt easily to city life. Recommendations also underline the need for widescale comparisons of carefully selected target populations and for sociodemographic indicators and health indices that are chosen to facilitate future planning. (ES)

- 2021 Bhardwaj, S.M.** *Attitude toward different systems of medicine: a survey of four villages in the Punjab, India.* Social Science and Medicine (Oxford), 9, 1975, 603-612. Engl. 15 refs.

In rural Punjab (India), modern and indigenous systems of medicine exist side by side, and this study suggests that the villager's decision to attend one or the other is based more on the anticipated effectiveness of treatment for a specific ailment than on a preference for one system or the other. A survey was undertaken in 1973, and 104 heads-of-households in four villages were interviewed during a 2-month period. The villages varied in their health facilities: one had practitioners of allopathy (modern), ayurveda (indigenous Indian), and unani (indigenous Ionian); another had a *vaidya* only (ayurvedic medicine); the third, a *hakim* only (unani); and the last had no permanent health practitioner. Results of the survey indicated that only a small percentage of the sample group preferred indigenous medicine to modern medicine, and in no case was this preference due solely to the practitioner's use of ayurvedic or unani system of treatment. About a third of the sample indicated that their preference for either modern or indigenous medicine would depend upon the particular malady. Socioeconomic data and practitioner preference have been correlated and appear in tables. (AC)

- 2022 Indonesian Planned Parenthood Association, Jakarta.** *Report on the study of dukuns in Central Java.* Jakarta, Indonesian Planned Parenthood Association, 1971. 58p. Engl.

In 1971, a study of the practices and status of *dukun bayis* (traditional midwives), in two rural districts of Indonesia, was undertaken to determine whether these individuals could contribute beneficially to a family planning programme. Fifty *dukun bayis*, 30 of their patients, and 20 formal and informal leaders were interviewed with regard to attitudes toward life, social values, religion, and family planning. Answers revealed that the *dukun bayis* viewed their midwifery as a gift from God to be practiced as a moral obligation, not as an occupation. All earned their living in other labours; however, many had undertaken courses in midwifery and family planning despite great inconvenience in travel and loss of wages. It was found that some of the midwives displeased their clients because they would no longer engage in traditional practices characterized as harmful in the midwifery courses. Discussions with persons in the community, however, indicated that most of the *dukun bayis* were respected and influential individuals. Some recommendations resulting from the study were that nearby clinic personnel should cultivate better relationships with the *dukun bayis*, that community leaders and women's groups should engage in family planning promotion, and that future upgrading for *dukun bayis* should incorporate religious rituals. (AC)

- 2023 Jansen, G.** *Doctor-patient relationship in an African tribal society.* Assen, The Netherlands, Van Gorcum and Co., 1973. 224p. Engl. 72 refs.

Communication between the Western-trained doctor and the traditional practitioner in Africa is often hampered by the doctor's inadequate understanding of the indigenous culture and idiom. With this in mind, the author has produced a study based on 11 years experience as a practicing physician in Bomvanaland, a Bantu homeland in South Africa. A brief description of the history, social and political organization, disease pattern, religion, etc. of the Bomvana is followed by a more detailed outline of their traditional system of medicine. Further chapters are devoted to an analysis of the linguistic and conceptual differences encountered by the doctor during medical history taking, examination, diagnosis, prognosis, and therapy. Medical history taking, for example, was completely foreign to the Bomvana, partly because disease was regarded as intentionally transmitted rather than contagious, but also because the traditional Bomvana healer was expected to tell the patient what was wrong with him and not vice versa. The final chapter contains a discussion of the best way to introduce preventive medicine and health education. In general, the author feels that an approach that makes use of illustrative stories related to tribal life is preferable to a detailed explanation of the aetiology of disease. (HC)

- 2024 Jocano, F.L.** *Maternal and child care among the Tagalogs in Bay, Laguna, Philippines.* Asian Studies (Quezon City), 8(3), Dec 1970, 277-300. Engl.

This study of maternal child care in the Philippines was based on the hypothesis that cultural practices are derived from scientific experimentation and observation. From 1968-1970, data were accumulated through direct observation and interviews. Questions that are answered in the study include: How are pregnant mothers attended to and in what way do they receive medical attention? What is the nature of prenatal, delivery, and postnatal care? How are infants nurtured? In the process of growing up, what are some of the cultural mechanisms used in dealing with the problems of health and sanitation? Results provide insights into present social and cultural practices prevalent in at least one area of the Philippines, a melding of tradition, modern attitudes, and religious beliefs. (AC)

- 2025 Lieban, R.W.** *Traditional medical beliefs and the choice of practitioners in a Philippine city.* Social Science and Medicine (Oxford), 10, Jun 1976, 289-295. Engl. 22 refs.

A 1962-1963 study into the choice of practitioners by Filipinos in Cebu City demonstrated the persistence of traditional medical practices in areas well serviced by modern medicine. Findings were that many parents consulted traditional practitioners for *piang* (damage to the skeletal structure caused by a fall) whose symptoms were alleged to resemble those of acute respiratory diseases. This practice delayed medical intervention and resulted in high child mortality due to bronchitis and pneumonia. When a minor infection cleared up, the traditional practitioner was credited with curing it; when an infection worsened and parents

took the child to a physician, failure of treatment was blamed on modern chemotherapy, not delay in care. People who had higher education and a knowledge of germ theory tended more often to consult physicians; therefore, public education through posters, lectures in schools, and mobile picture units is recommended. (ES)

- 2026 Unschuld, P.U.** *Western medicine and traditional healing systems: competition, cooperation or integration?* Ethics in Science and Medicine (Oxford), 3(1), May 1976, 1-20. Engl. 46 refs.

Medical resources have been continuously transferred between different cultures in mutual contact. The transfer of primary medical resources from the West to non-Western cultures is a spectacular example of this process. In many cases such interactions have given rise to the unstructured coexistence of different medical subsystems within one health care delivery system. Policies fostering structured coexistence may result in structured competition or in structured cooperation or in structured integration with respect to each of the four dimensions of medical subsystems. These dimensions, in order of their increasing resistance to structured coexistence, are drugs, techniques, manpower, and concepts. While the unstructured coexistence of various medical subsystems has been recognized as a problem worldwide, significant pilot projects and government policies favouring structured coexistence have only been implemented in a few countries. In contemporary Taiwan, as well as India, there persists a situation of legally structured competition between traditional and Western-style subsystems, together with illegal integration of Western drugs and techniques by traditional practitioners. Only in China has structured cooperation between Western-style and traditional manpower been achieved. The barefoot doctors are an example of the structured integration of traditional and modern drugs and techniques; however, Western scientific concepts predominate in Chinese medical literature and research. (Modified author abstract.)

- 2027 Verderese, M. de L.** WHO, Geneva. *Consultation on the role of the traditional birth attendant in maternal and child health and family planning. Report of review and analysis of information and data on traditional birth attendants.* Geneva, WHO, 1973. 163p. WHO/HMD/NURS/73.3. Engl. 155 refs.

Many countries in the developing world have programmes to upgrade the traditional birth attendants (TBAs) and even to introduce them into family planning activities. This study, sponsored by the World Health Organization, was struck to investigate such programmes. Data collection comprised a review of the literature, author observations of training and service programmes, and surveys undertaken by WHO regional offices. Sixty-nine countries provided data for questions about legal status of TBAs (restrictions of practice, etc.); national or local projects to identify and register TBAs; service, training, and supervision programmes; incentive systems; studies, surveys, or reports; and future plans to replace or supplement the

activities of the TBAs. Information has been compiled and is set forth, but generalizations from the material are difficult, because of the relative paucity of previous studies. The findings are in textual form but have been summarized in tables. The questionnaire sent to WHO member countries is annexed. (AC)

- 2028 Young, A.** *Internalizing and externalizing medical belief systems: an Ethiopian example.* Social Science and Medicine (Oxford), 10, 1976, 147-156. Engl. 35 refs.

This systematic account of the way the Amhara (Ethiopia) use their medical beliefs illustrates that a people's belief system makes it possible for them to organize effective therapeutic strategies. The forms that beliefs take can be conceptualized as narrative or physiological, and systems of medical beliefs can be conceptualized according to the degree to which they are dominated by either form of explanation. Although neither form is intrinsically more or less rational than the other, systems dominated by narrative explanations are frequently derogated as "supernatural" and nonempirical. This mistake results from studies that characterize all medical beliefs as attempts to control events within the bodies of sick persons instead of studying them in the context of phenomenological reality and the division of labour in society. Emphasis is given to the way narrative and physiological notions articulate with conceptualizations of healing power. Healing power is approached by contrasting the different kinds of therapeutic strategies Amhara use, indicating how the strategies are encoded in particular taxonomies, and identifying the ways in which these powers are empirically confirmed. (Modified author abstract.)

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

See also: 1537, 1577, 1599, 1675, 1689, 1972, 1990, 1995, 2001, 2005, 2006, 2017, 2022

- 2029 Alpert, J.J., Robertson, L.S., Kosa, J., Heagarty, M.C., Haggerty, R.J.** *Delivery of health care for children: report of an experiment.* Pediatrics (Springfield, Ill.), 57(6), Jun 1976, 917-930. Engl. 20 refs.

A 1964-1968 experiment offering primary care to 179 low-income families in Boston resulted in a shift in emphasis from curative to preventive medicine, increased patient satisfaction, and a reduction in laboratory use and expenses. However, there was no evidence that patient morbidity was altered. During the experiment, primary care was offered by the Harvard Medical School clinic, and services were designed to resemble pediatric group practice in such details as facilities and amount of treatment administered by a physician. The sample families all had at least one child under age 16

and represented most minorities except Spanish Americans. During the 2nd year of the experiment a national system, subsidized medical care, was introduced, but it made no difference in the health care patterns of the sample group and apparently benefited only those control families who were white. The authors recommend more controlled clinical trials of this type as the best means of comparing different models of primary care and obtaining essential data for planning health services for children. Statistical data are included. (RD)

- 2030** Alvarez Vazquez, L. Cuba, Ministry of Public Health. *Estudio de fecundidad en las mujeres de la ciudad de Santa Clara. (Fertility study of women in the city of Santa Clara)*. Havana, Ministry of Public Health, Jun 1973. 31p. Span.

See also entries 2031 and 2032.

The Cuban Ministry of Public Health sponsored, in February 1972, the second in a series of fertility surveys. Public health students interviewed 1 083 women from ages 15-54 in the city of Santa Clara. Presurvey publicity had made the public receptive to the interviewers' visits, and the questions were those used in the previous survey (Revolution Square, Havana). Results indicated that the best-known contraceptive methods were intrauterine devices, sterilization of women, and condoms, although the methods most commonly employed were the intrauterine device and those used by men. The fertility level of Santa Clara was 1.3 times greater than that of Revolution Square; the abortion rate was about the same. Additional fertility data from the two surveys were similar. Tables and graphs are included. (RD)

- 2031** Alvarez Vazquez, L., Ruben Quesada, M. Cuba, Ministry of Public Health. *Encuesta de fecundidad en la region Plaza de la Revolucion. (Fertility survey of the Revolution Square district)*. Havana, Ministry of Public Health, 1973. 40p. Span.

See also entries 2030 and 2032.

In September 1971, a group of 3rd-year public health students surveyed 1 751 women from the ages of 15-54 living in the Revolution Square district of Havana, Cuba, in order to test methods of obtaining information on fertility and contraceptive practices and to obtain information on contraception, births, infant mortality, abortions, and miscarriages. Contrary to their expectations, the researchers found that the majority of women interviewed had no reservations about answering the intimate questions essential to this type of survey; 98.9% of the women interviewed were familiar with one or more contraceptive methods, more than half had used some form of birth control at one time or another, and 46.4% were doing so at the time of the survey. The birthrate for the sample group was low compared to other parts of Latin America; and the percentage of miscarriages and/or abortions per live births was high. The questionnaire used by the home interviewers solicited information on pregnancy history, contraceptive knowledge, profession, education, and

marital status. The definitions, methods, and processing of the survey are explained, and the results are discussed and converted into graphs and tables. A mathematical model of the sample population is included in the appendix. (RD)

- 2032** Alvarez Vazquez, L. Cuba, Ministry of Public Health. *Estudio de las mujeres en edad reproductiva. (Study of fertile women)*. Havana, Ministry of Public Health, 1973. 82p. Span.

See also entries 2030 and 2031.

In a December 1972 survey of 3 915 women aged 15 to 50 in Yateras, Cuba, public health students conducted home interviews to test urban survey methods in a rural setting and to obtain information on fertility and contraception for the use of the Ministry of Public Health. This survey, third in a series designed to establish a national fertility survey methodology, was the most complete and was the first to make allowances for women who were not interviewed. More than 90% of the women responding had some knowledge of contraceptive methods, although not all had used them. Sterilization was more common in women aged 35 to 39 than in any other age group, and women who practiced birth control were more likely to seek abortion. The incidence of induced abortion was low, and fertility levels were high, compared to rates of previous surveys. Education was apparently the only circumstantial variable that directly affected fertility levels. Statistical data are included. (RD)

- 2033** Anand, D., Rao, A.R. *Primary health centre and family planning: an exploratory study*. Licentiate (Ambala Cantt, India), 13(7), Nov 1963, 223-231. Engl. 10 refs.

This study in India tests the hypothesis that the mere addition of human and material resources cannot give impetus to a family planning programme and that a programme can only be successful when all staff members understand it and are able to visualize their role in promoting it. The study was initiated because the health ministry's financial support for family planning programmes in health centres had made negligible impact on practices. Investigators interviewed and observed 17 staff members in a rural primary health centre to examine their attitudes toward, and roles in relation to, family planning activities. Interviews centred on each employee's appreciation of the importance of family planning, perception of his potential role as provider of information and services, and awareness of his specific duties related to these services. Study findings suggested that lack of clear directives, coordination, and in-service training made subordinate staff hesitant to advise on family planning despite their knowledge of it, while heavy responsibilities in other areas prevented doctors and nurses from doing so. Recommendations are that a clearer definition of roles, a better preparation of all staff, and the integration of family planning with other services be attempted. (HC)

- 2034** Ananthasubramaniam, L., Sitaratna, A., Jayam, S. *Family welfare scheme: a preliminary*

survey. *Indian Pediatrics* (Calcutta), 12(10), Oct 1975, 1035-1037. Engl.

This family health programme, which combined immunization and family planning, profoundly increased the immunization rates and doubled the numbers of family planning acceptors in an urban centre in India. A total 650 families were chosen at random and visited by welfare workers. At these visits, the health workers spoke to parents about the value of immunization and family planning and examined children under age 5. Later, the children were given complete physical examinations at the hospital and given DPT, polio, and BCG vaccinations. An examination of existing records indicated that 87% of the children underwent the total series of immunizations and that parents significantly increased use of family planning methods — the percentage of eligible couples who were using temporary methods of contraception increased from 3 to 12 and the percentage depending on sterilization rose from 11 to 23. (AC)

2035 Awwaad, S., Khalifa, A.S., Aboul Naga, M., Tolba, K.A., Fares, R., Gaballa, A.S., el-Hayeg, O., Wahhab, S.A. *Field survey on child health in a rural community in Egypt.* *Journal of Tropical Medicine and Hygiene* (London), 78(1), Jan 1975, 20-25. Engl. 10 refs.

A field survey on child health in an agricultural community in Egypt revealed that childhood growth and development proceeded at lower rates than in urban areas; that the vaccination scheme, although obligatory, was not largely administered to children in rural areas; and that parasitic infestation was higher than in urban areas, but lower than when a safe water supply was installed in the community in 1959. It is recommended that more services for the preschool child be made available — perhaps through a cooperative effort on the part of medical faculties and local health authorities — and that more emphasis be put on health education. (HC)

2036 Bactat, J.L. *Health problems of mothers and children (an abstract).* *Santo Tomas Nursing Journal* (Manila), 4, Dec 1965, 225-233. Engl.

The high mortality of women during childbirth and of children under age 5 prompted this study of health problems in the Philippines. In five *barrios* of Vinzons, all women with children under 5 were interviewed in their homes to ascertain health problems and to identify the available resources for health care. The investigation revealed that for most of the 2 247 pregnancies no pre- or postnatal care had been sought and more than three-fourths of the deliveries were performed by indigenous midwives (*hilots*). The *hilots* practiced some harmful procedures, which contributed to both maternal and neonatal mortality, and even the available health personnel poorly attended the pregnant women who went to them. Of the 196 children who died before age 5, 65% were infants. Harmful customs, poverty, and poor sanitation, all universal in the *barrios*, were evidenced by the major causes of morbidity

and mortality among children under 5 — gastrointestinal and respiratory tract diseases, ascariasis, umbilical cord infection, measles, skin diseases, and accidents. Although a rural health unit staffed by a physician, one public health nurse, two midwives, and a sanitary inspector was available to the *barrio* inhabitants, few children were immunized and follow-up medical care was nonexistent. Recommendations as a result of the study are set forth and are followed by a comparison of the findings in Vinzons with the conditions prevalent in the nation. (AC)

2037 Bader, M.B. *Breast-feeding: the role of multinational corporations in Latin America.* *International Journal of Health Services* (Westport, Conn.), 6(4), 1976, 609-626. Engl. 30 refs.

The decline of breast-feeding in developing countries, especially Latin America, has serious implications for infant health and must be diverted by positive government action. Breast milk is an inexpensive, sanitary, nutritional source of food, and breast-feeding is a natural way to protect infants against infectious disease and to space pregnancies. However, social pressures and the advertising campaigns of multinational corporations have encouraged the use of infant formula, which, because of its high cost and the lack of sanitary and hygienic conditions, is often watered-down and contaminated. Under these circumstances, bottle-feeding has led to malnutrition and disease. A study of the effects of bottle-feeding on infant mortality in Chile in the decade 1960-1970 shows that postneonatal deaths occurred three times more frequently in bottle-fed babies. Yet, some health personnel and agencies have supported the dubious claims of the formula manufacturers who, in the face of declining birthrates in developed countries, have sought new markets in the growing populations of the Third World. In the interests of the health and welfare of their people, the governments of developing countries must restrict the activities and advertising practices of these multinational corporations and, at the same time, publicize the immunological and nutritional value of breast-feeding both through advertising campaigns and in the training of health practitioners. (ES)

2038 Beasley, W.B. *Nurse-midwife as a mediator of contraception.* *American Journal of Obstetrics and Gynecology* (St. Louis), 15 May 1967, 201-207. Engl. 8 refs.

A study of the 1958-1965 medical records of contraceptive acceptors in rural Appalachia (USA) revealed a pregnancy rate of 0.3 per 100 woman years for patients taking birth control pills and a single case of pregnancy among those who used intrauterine devices. The study population comprised 307 contraceptive users and 233 controls; the women were patients of the Frontier Nursing Service, which has six district nursing centres located in the 750 square mile area around Hyden, Kentucky. The nursing centres began dispensing oral contraceptives in 1958 and intrauterine devices in 1964. The study of their records indicated an average age of 27 for contraceptive users and 23 for the control group.

Records also showed the control group had fewer children and were apparently less fertile. In addition, women who had IUDs inserted by nurse-midwives experienced rates of expulsion and removal lower than those who had physician-inserted IUDs. In the former group of 150, 87% continued use compared to 68% in the latter group of 60. Statistical data are included. (RD)

- 2039 Belcher, D.W., Pobee, J.O., Larbi, E.B., Ocran, K., Wurapa, F.K.** *Rural health examination survey in Ghana: nonresponse factors.* Public Health Reports (Rockville, Md.), 91(4), Jul-Aug 1976, 368-372. Engl.

The first of three planned surveys, undertaken by the Danfa Comprehensive Rural Health and Family Planning Project, Ghana, elicited an overwhelming 97.5% participation from the sample. The survey was conducted from January to March 1973, and the sample population comprised 3 745 persons from 20 rural villages. Because the survey aimed to provide baseline data for future health programmes, a comprehensive response was needed. Thus, survey planners incorporated extensive preeducation and follow-up measures. Investigators met with traditional leaders 2 weeks before the survey, explained the survey's purpose, and emphasized the opportunity for each villager to be examined by a physician. The six interviewers then moved into the villages 5 days before the survey and began registering the study population, interviewing persons, and promoting the survey through personal contact. They had been trained to recognize and report potential nonparticipants to their supervisor who followed them up. Influential persons who were not included in the sample population were invited to participate as guests. The initial response was 94.8%, and follow-up home visits added another 2.7%. Therefore, a total of 3 653 persons underwent physical examination and provided information for a health questionnaire. Male nonparticipants exceeded female nonparticipants 2 to 1, and reasons given for not participating ranged from employment to lack of interest. Factors associated with adult male nonparticipation included residence in larger villages, salaried nonfarming occupations, and good health. (AC)

- 2040 Belcher, D.W., Neumann, A.K., Wurapa, F.K., Lourie, I.M.** *Comparison of morbidity interviews with a health examination survey in rural Africa.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 25(5), 1976, 751-758. Engl.

This paper describes a study of the Danfa Comprehensive Rural Health and Family Planning Project, Ghana. The report compares information obtained from morbidity interviews with information obtained during subsequent health examinations. One to 4 days prior to examination by a team of physicians, 3 653 rural Ghanaians were interviewed by a team of auxiliary workers. Information obtained from the interview survey was noticeably different from examination diagnosis. Significant health problems such as malaria, intestinal

parasites, and diarrhea, as well as minor and chronic conditions, were seriously under-reported. Interview findings were more accurate for children, women in the reproductive age-group, and in cases in which the disease caused considerable discomfort or disability. Although individual examination was eight times as costly as an interview, small-scale rural health examination surveys of a representative sample of the population are recommended to provide accurate morbidity information for health planners. (Journal abstract.)

- 2041 Bennett, F.J.** *Mortality in a rural Zulu community.* British Journal of Preventive and Social Medicine (London), 14, 1960, 1-8. Engl. 24 refs.

Death rates and causes of death are presented for a rural Zulu community in Polela District, South Africa. The information was gathered by the district health centre using, amongst others, field-workers whose duties included census work and notification of births and deaths. Death rates over the period 1945-1956 declined most notably in children, especially those between ages 1 and 12 months. Improved health education and intensive nutrition and immunization campaigns are held responsible for this decline, rather than the introduction of curative facilities. The author discusses the changing trends of deaths in neonates, infants, children, and adults and also the limited reduction in the number of stillbirths — the last appears to be caused in part by poor antenatal care and maternal malnutrition. Many of the deaths in children under 6 years of age are caused by intestinal infections and malnutrition, and although provision of subsidized dried milk powder would help these children, there still remain the underlying social and economic causes of death that are not amenable to medical treatment, including lack of opportunity to earn a reasonable salary and the time mothers must spend working in the fields away from their children. (MPM)

- 2042 Berggren, W.L.** *Administration and evaluation of rural health services: 1. Tetanus control program in Haiti.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 23(5), Sep 1974, 936-949. Engl.

In Deschappelles, Haiti, the incidence of neonatal tetanus has declined 86%, and hospital admissions for tetanus in adults have been reduced by an estimated 2 950 persons as a result of a mass immunization campaign. From 1968-1973, the community health services of the Albert Schweitzer Hospital carried out a two-pronged campaign: a mobile vaccination unit conducted a community immunization programme that reached some 55 000 rural people, and a single doctor or nurse with the help of numerous auxiliaries held marketplace clinics to provide a series of three injections to more than 150 000 Haitians, of whom 72% completed the series. Experienced auxiliary health workers who assisted at these clinics included rural health officers, health educators, gatekeepers to examine medical records, troubleshooters for tracking down lost records, and hospital clerks. Additional clerks, guides to direct the crowds,

and jet injector operators who administered the injections and maintained the machinery were recruited locally and briefly trained. The author describes the following aspects of these clinics: publicity, timing, handling of crowds, instructions to patients, record keeping, the injections by jet injectors, and dosages. There were few medical complications; however, some patients received overdoses because they lied or were confused about the number of their previous injections. The campaign cost U.S.\$67 000, or approximately one-ninth the expense of hospitalizing the estimated numbers of patients who would have developed tetanus if the campaign had not been undertaken. The resulting saving of U.S.\$601 800 could be spent on fighting other diseases. (RD)

2043 Bernieri, R. *Situation de la sante au Venezuela et quelques orientations pour l'action sanitaire. (Public health in Venezuela and some directives for health planning).* Annales de la Societe Belge de Medecine Tropicale (Brussels), 48(3), 1968, 339-379. Fren.

Health statistics, gathered in Venezuela between 1950 and 1964 (with emphasis on the period 1960-1964), are set forth in 32 tables, and provide some directives for future planning. The data are grouped under four headings: vital statistics (population, births, life expectancy at birth, deaths, and death by cause); child mortality (under-fives mortality, infant mortality, mortality by cause, etc.); communicable diseases (mortality and morbidity due to each disease); and environmental health (malaria control and water supply, sewage disposal, and housing in rural and urban areas). The need for a more efficient registration of vital events and a more detailed analysis of statistical data is pointed out, but 17 indicators of the direction future planning should take are nonetheless identified. These focus on the need for regional as opposed to central planning; health and other services in the rural areas; efforts concentrated on reducing communicable disease, under-fives mortality, and diseases due to insanitary conditions; total health care and health education; and a campaign in accident prevention. Discussion of data and recommendations follows. (HC)

2044 Black, T.R., Harvey, P.D. *Report on a contraceptive social marketing experiment in rural Kenya.* Studies in Family Planning (New York), 7(4), Apr 1976, 101-108. Engl. 21 refs.

Contraceptive use in rural Meru district (Kenya) increased 21% as a result of a 1972 mass campaign conducted by Population Services International. The purpose of the campaign was to test the hypothesis that social marketing techniques can and should be used to promote family planning, which is a social, rather than a medical, responsibility. In the planning stage of the campaign, two surveys were undertaken to determine consumer and merchant attitudes toward condoms; from the results, a local advertising agency designed a marketing strategy for a type of condom called Kinga (the Swahili word for protection). The strategy incorporated such aspects as, product selection, colour, etc.;

packaging for eye appeal and conservation of display space; price; and distribution. A mobile education unit promoted condom use among men aged 18-30 in the target villages, and then local merchants stocked the products. The cooperation of local merchants was essential to the campaign's success, because they defended the product when political and religious extremists attempted to take it off the market. Although the Kinga campaign reached only 20% of the potential market in the 1st year, it promoted sales, created a high level of brand awareness and an accurate product image, and significantly increased public awareness of condoms and contraceptives in general. Within Meru district, condoms became a popular form of birth control second only to the pill, whereas in the rest of Kenya they remained virtually unknown. Among other observations, the authors note that a six-man sales team could effectively service a 1.5 million rural population with all types of contraceptives, and a similar campaign could be conducted in a small nation of some 12 million people for approximately U.S.\$250 000-300 000. (RD)

2045 Brant, J.C., Nowotny, M. *Testing of visual acuity in young children: an evaluation of some commonly used methods.* Developmental Medicine and Child Neurology (London), 18(5), 1976, 568-576. Engl.

In a comparative study of screening tests for visual acuity in young children, two groups of children were presented with three different tests. In the younger group (3-5 years), three single opto-type tests were compared: Sheridan's five and seven letter matching set, the Fooks' test, and the E card test. The Sheridan test gave the best results, and the E card test was found to be unsuitable for this age-group. The Fooks' is an attractive test but was less sensitive in the detection of defects than the Sheridan test. In the older group (5-7 years) a single opto-type test, the Sheridan-Gardiner test, was compared with the E chart and the Snellen chart. The Sheridan-Gardiner test was found to have limitations in the detection of defects, including amblyopia; therefore, results obtained by this method should not be considered to be directly comparable to those from the Snellen chart. The E chart gave good results in the detection of defects, and there was less lateral confusion than had been expected. It has disadvantages, but there is still a place for its use in the screening of normal school-age children. The Snellen chart was the most effective chart in the detection of defects, but not all the children were able to cooperate in its use. It is concluded that, where it is possible to use the Snellen chart, it should always be the method of choice. (Journal abstract.)

2046 Buck, A.A., Sasaki, T.T., Anderson, R.I. *Health and disease in four Peruvian villages: contrasts in epidemiology.* Baltimore, Md., Johns Hopkins Press, 1968. 142p. Engl.

A comparative study of four Peruvian villages carried out by a team of American and Peruvian researchers yielded data of great epidemiological interest and of practical value to the Peruvian Ministry of Health in

formulating plans and priorities for health services. This investigation also contributed to new or improved methods of data processing appropriate for studies in developing countries. One village was chosen from each of the following areas: tropical jungle, medium elevation, northern arid zone, and high Andes. Data derived from physical examinations of the village inhabitants were compiled on nutrition and nutritional deficiencies; blood pressures; birthrates, pregnancies, and abortions; values for haemoglobin and haematocrit; vaccination histories; incidence of animal bites and specific parasitic, bacterial, rickettsial, viral, and other diseases and infections; and the prevalence of coca leaf chewing. The members of the research team included epidemiologists, an anthropologist, an entomologist, a sanitary engineer, public health nurses, laboratory scientists, and technicians. There are copious statistical data and an appendix of materials and methods. (RD)

- 2047 Burgos, V.A.** *Chagas' vector control and improvement of rural health.* Ekistics (Athens), 40(239), Oct 1975, 256-257. Engl.

A 1966 study of a Venezuelan community, which was highly infested with insects carrying Chagas' disease, compared infestation found in shacks with that in houses. Results demonstrated the importance of hygienic housing to the elimination of Chagas' disease. The 226 houses selected for the study were built by the government and had laminated ceilings, plaster walls, and cement floors. Although these houses were surrounded by infested shacks and had never been sprayed with insecticides, they demonstrated no infestation during a 2-month examination in the summer of 1966. On the other hand, investigation of shacks revealed that even those that had been sprayed previously were infested. Although this study indicates the need for hygienic housing, the replacement of all shacks would be financially impossible for Venezuela; an interim measure that would be feasible, however, is the improvement of shacks with new roofs and walls. (ES)

- 2048 Cassel, J.** *Health consequences of population density and crowding.* In *Rapid Population Growth: Consequences and Policy Implications*, Johns Hopkins Press, Baltimore, Md., 1971, 462-478. Engl. 53 refs.

As the result of recent studies, the hypothesis that overcrowding causes illness by aiding the spread of disease agents has been seriously questioned. A more reasonable hypothesis may be that disease agents are present in the human body but exert deleterious effects most often when accompanied by undue emotional stress, which then sets off an imbalance in hormone secretions. Previous overcrowding studies, which led to widespread acceptance of the hypothesis, were conducted on individuals who had just migrated to urban areas or had just entered the industrial milieu, — both situations ripe for stress. Later investigations, however, indicated that persons adjusted to crowding and that other factors, such as a person's position in a hierarchical group and the presence or absence of supportive experiences,

as well as relationships, were more influential elements in the prevalence of both infectious and noninfectious disease. Persons outside a group with few supportive experiences or relationships tended to be the most regular victims of illness and the most severely debilitated by individual episodes. The implications of such findings are considered for developing countries. (AC)

- 2049 Chen, P.C.** *Attendance at a child health clinic in Malaysia.* Journal of Tropical Medicine and Hygiene (London), 78(1), Jan 1975, 6-12. Engl. 12 refs.

One hundred and ninety-nine children brought by 181 adults to a child health clinic based in a rural health subcentre in Peninsular Malaysia are studied. The families of the children are relatively poor, with a large number of children, and are fairly highly motivated. Forty-four percent of children attending the clinic at the time of the study are symptomatic, indicating the need to organize the child health clinic on a "preventive-curative" basis. The young child is initially seen in early infancy but is lost in the clinic when he is older, making it judicious to formulate immunization schedules that take this into account. (Modified author abstract.)

- 2050 China R. Taiwan Provincial Health Department.** *Annual report: Jul 1970-Jun 1971.* Tai-chung, Taiwan Provincial Health Department, Committee on Family Planning, Nov 1971. 87p. Engl.

This report summarizes the development of family planning programmes in Taiwan and outlines the findings of the Committee on Family Planning, which investigated the operations of the 5-year programme in the fiscal year 1970. Four main areas are considered: administration; action on the programme (with tabulated data on vital rates, the practice of contraception, medical aspects, family planning education, and training); measurement of programme effects and follow-up surveys; and the role of a team from the population studies centre of the University of Michigan that worked in Taiwan for 3 months on training and survey analysis. (DL)

- 2051 Chung, H.S.** *Some opinions on sickness and utilization of medical care in Korean rural areas.* In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 41-42. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

Results of a survey of 14 472 rural people in 2 626 farm households undertaken in Korea in 1968-1969 are summarized in point form. Particularly interesting among these are the following: disease incidence was highest in the 50-59 age-group and lowest in the 10-19 age-group; the need for therapeutics was greatest for the age-group up to 4 years; most uncured sick persons

cited financial factors as their main reason for not seeking treatment; diseases of the digestive system were the major cause of sickness; and the ratio of urban to rural populations was 60:40 whereas the ratio of urban doctors to rural doctors was 67:33. Suggested measures to alleviate these problems include the following: implementation of the "one community/one doctor" plan; organization and utilization of traveling clinics; establishment of an institution of community medical services; establishment of a county hospital system; recruitment of medical graduates to rural areas; and introduction of medical insurance. (HC)

- 2052 Gaisie, G.** *Family planning and the people's attitude towards having children.* The Medic: Journal of the Ghana Medical Students' Association (Accra), 5(2), Oct 1970, 14-16. Engl.

The Ghanaian attitude toward having children is examined with a view to predicting the likelihood of Ghanaian acceptance of the proposed national population policy. Traditionally, children have been regarded as a source of social prestige and influence, labour, and security in old age. To be childless was considered a disgrace, reason for dethroning a chief, and grounds for divorce. Innumerable remedies for overcoming sterility were sought and practiced. Recent evidence suggests that economic pressure is beginning to bear on the desired family size and that there are enough potential acceptors to justify starting a family planning programme. Family planning acceptance for reasons other than economic seems unlikely, however, as Ghanaians still appear to want as many children as they can afford. (HC)

- 2053 Galdston, I., ed(s).** New York Academy of Medicine, New York. *Man's image in medicine and anthropology: monograph 4.* New York, International Universities Press, 1963. 525p. Engl.

The basic themes of this collection of papers exploring the relationship between medicine and anthropology are man's health and man's understanding of himself. The first group of articles focuses on medicine and primitive man and deals with the relationships between medicine and magic and medicine and religion, including a survey of anthropological literature from the point of view of Western public health standards. The second section studies medical men and medicine men in three North American Indian societies: Navajo, Ojibwa, and Chippewa. In the third section the papers concentrate on the psychiatric approach to the medicine-anthropology relationship, including such problems as cross-cultural attempts at medical diagnosis, i.e., the attempt to use Western standards to locate and define mental illness in a non-Western sector of the world. The final grouping of articles on culture and the practice of modern medicine examines such aspects of Western medicine as the overlap between medicine and psychiatry and the analysis of medical practices by means of modern value theory. (RD)

- 2054 Giglioli, G., Ch'en, W.I., Marchant, D.E., Howell, P.** *Malaria eradication in Guyana.* Tropical Doctor (London), 6(3), Jul 1976, 126-132. Engl.

A study of malaria prevalence and control in Guyana was undertaken to determine why antimalarial measures have not been 100% effective. Massive household spraying with DDT was begun in 1945 and was highly successful in controlling the disease in the densely populated coastal area. In 1961, control was extended into the sparsely populated interior by the systematic distribution of chloroquinized salt. In 1966, a combination of both measures was applied in infected areas. Two facts are brought to light regarding malaria incidence since 1961: that indigenous outbreaks occurred during periods of relaxed surveillance and that during a period of universal coverage (1969-1972) such cases as were found were due to either imported or introduced infection. It is, therefore, recommended that "unremitting continuity of surveillance" be maintained in the interior by suitably qualified Amerindian auxiliaries and that international cooperation in malaria control be pursued. (HC)

- 2055 Guthrie, H.A.** *Nutritional status measures as predictors of nutritional risk in preschool children.* American Journal of Clinical Nutrition (Bethesda, Md.), 29(9), Sep 1976, 1048-1050. Engl.

Data from 19 dietary and biochemical indices of nutritional status for 419 participants in a preschool nutrition survey were analyzed to determine the smallest number of variables that could be used to identify all children with nutritional inadequacies. Serum transferrin iron and dietary iron intake identified 74% of those at nutritional risk, but additional information, including intake of dietary calories, calcium, ascorbic acid, thiamin, and vitamin A, was needed to identify all subjects at risk. (Modified journal abstract.)

- 2056 Hughes, C.C., Hunter, J.M.** *Disease and "development" in Africa.* Social Science and Medicine (Oxford), 3, Apr 1970, 443-493. Engl. 208 refs.

A study of the effects of "development" activity on the disease pattern in Africa reveals that increased incidence of disease is often the unwanted side effect of developmental intervention. Following a description of the aetiology and prevalence of the diseases and conditions commonly found in that continent, the role of development in aggravating the existing disease patterns is examined. Modernizing trends such as migrant labour and improved road linkages have fostered the spread of disease from one area to another; manipulation and control of water resources for irrigation schemes has resulted in excellent transmission networks for the diffusion of schistosomiasis and malaria vectors (snails and mosquitoes); the introduction of cash crops has led to the neglect of traditional diets and proper food production, resulting in malnutrition; and the process of urbanization itself has been conducive to widespread physical and psychological pathology.

Documentary evidence is cited in each case. The authors urge that planners view development from an ecological perspective, i.e., one that anticipates the total range of effects consequent upon the introduction of a given scheme. (HC)

- 2057 Indian Council of Medical Research, New Delhi.** *Growth and physical development of Indian infants and children.* New Delhi, Indian Council of Medical Research, Medical Enclave, Technical Report Series No.18, 1972. 176p. Engl. 11 refs.

This nationwide cross-sectional study was carried out in India (1957-1965) to establish reference standards of growth and development of Indian infants and children. Data on children from age 1 to 21 were collected from the whole country, and from each of the individual states. In addition, the influence of income, socioeconomic status, religion, and residence (urban or rural) on the growth and development of Indian infants and children was studied. Each child was examined by a medical officer to ensure that he qualified as "normal." Growth was assessed through six anthropomorphic measurements — standing height, sitting height, weight, bicristal diameter (hip width), and head and chest circumferences — while development was ascertained through observation of the signs of puberty. Demographic and environmental data were collected for each child. Survey findings are discussed, evaluated, and presented in 89 tables; standard forms used during examination are included. (HC)

- 2058 Izumiyama, T., Nagata, H., Kamata, K., Kono, S.** *Effects of health control in a rural village and problems yet to be solved.* In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 72-75. Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

The implementation, over an 8-year period, of a total-village health control programme in the rural village of Kijimadaira, Japan, has been instrumental in improving the health of its inhabitants. As part of the programme, all the village adults were provided with "health notebooks," and the regional hospital conducted a yearly mass health examination. The programme has resulted in the reduction in the prevalence of ascariasis and hookworm — once affecting, respectively, 80% and 35% of the population — to 1%. Prevalence of hypertension dropped from 46% to 22%, and the percentage of latent diseases dropped from 78 to 40. In addition, the ratio of increase in the per-family share of the national health insurance in Kijimadaira has become lower year by year in comparison with other villages. It is suggested, however, that financial responsibility for the mass examinations — now assumed by the village itself — would well be taken on by

the national health insurance scheme as part of its preventive effort. Finally, as a solution to physician shortages in rural areas such as this, a recently established health centre that conducts computerized mass health examinations and multilateral analysis of the blood using an "auto-analyzer" is cited. (HC)

- 2059 Joy, L.** Institute of Development Studies, University of Sussex, Brighton. *Food and nutrition planning.* Brighton, England, University of Sussex, Institute of Development Studies, Reprint 107, Jan 1973. 22p. Engl. Refs.

This paper discusses food and nutrition planning. It presents a planning schema in which static micro level analysis is incorporated into a dynamic general equilibrium framework. The paper is critical of conventional policy approaches based as they are on false notions of the nature of the nutrition problem. The problem is generally one of calorie rather than of protein deficiency, and it arises from inadequate effective demand for food rather than a result of insufficient supply. If the continued existence of malnutrition is not simply to be accepted it will have to be treated as primarily a symptom of poverty. Thus, policies to end it will seek to generate incomes among the poor. Analytical and empirical work is needed to identify the nature of specific policy alternatives and to predict their effects. Practical criteria to reflect social objectives still need to be developed. Technological approaches to increasing food supplies overlook the poverty of the undernourished and the prediction of growing food "surpluses." (Author abstract.)

- 2060 Kessel, E., Bernard, R.P.** *Evaluation of a family health programme: indices derived from structure, prevalence, and incidence.* Chapel Hill, N.C., Carolina Population Center, 1971. 18p. Engl. 9 refs.

Conference on the Teaching and Practice of Family Health, Kampala, 29 Nov-3 Dec 1971.

This report describes some theoretical and practical requirements of family health programme evaluation and suggests approaches to the development of sensitive indices for measuring programme performance. The authors point out that all family health programmes have the dual function of providing family planning services as well as improving health levels through medical intervention, and both these aspects must be measured and the results coordinated to get a true picture of the effectiveness of a particular programme. The authors propose two series of performance indices that are based on compositional analysis of the sample population and prevalence accounting. These indices are meant to help optimize both family health programmes and the information derived from guided implementation of such programmes. At present, family health programmes are being implemented in Africa according to these guidelines; they should generate much needed baseline data on patterns and trends of community health characteristics and furnish

prototypes of programme structures for use on an international level. Sample statistical data are included. (RD)

- 2061 Korotyayev, A.I.** *Sostialisticheskoye zdavookhraneniye Kuby i ego uspekhi v borbe s infektsionnymi boleznyami. (Socialist public health in Cuba and its success in the control of infectious diseases).* Mikrobiologiya, Epidemiologiya Immunobiologiya (Moscow), 44, Nov 1967, 93-99. Russ.

Data obtained during the sixties in Cuba are set forth in nine tables, entitled as follows: urban and rural populations of various ages in Cuba; distribution of doctors in the provinces; number of different medical establishments in the country; number of medical establishments before and after the socialist revolution; rate of infectious diseases in 1963-1964 (29 diseases mentioned); and number of poliomyelitis cases in the years following mass immunization. Also listed are deaths caused by acute intestinal infections in different Latin American countries; poliomyelitis cases in some American countries (Argentina, Brazil, Canada, etc.) in 1964; and cases of malaria in some Latin American countries in 1962 and 1965. (HC)

- 2062 Lee, S.K., Kim, D.H., Hong, S.H., Kim, H.K., Yeh, M.H., Jung, J.H., Chae, H.K.** Kyungpook National University, School of Medicine, Taegu. *Study on maternity aids utilization in the maternal and child health and family planning.* Taegu, Korea, Kyungpook National University, Aug 1972. 18p. Engl., Korean. 9 refs.

A project to improve maternal child health in a rural area of Korea has proved moderately successful, and its results strongly support the introduction of similar programmes elsewhere. The methodology of the project was to identify educated women within the rural areas, train them as maternity aides, and motivate them to provide health and family planning education to pregnant and newly delivered women. Before this project was undertaken, few women utilized the services of government midwives; most relied on traditional birth attendants whose practices contributed to maternal and infant mortality. The maternity aides encouraged pregnant women to use "birth kits," and in this endeavour they were successful. Their effectiveness during childbirth, however, was minimal. As referral agents also they were only minimally effective, but through their urgings more mothers registered the births of their children within 1 year (Korean law requires that births be reported to vital statistics agencies within 14 days). (AC)

- 2063 Levine, R.J., D'Souza, S., Khan, M.R., Nalin, D.R.** *Failure of sanitary wells to protect against cholera and other diarrheas in Bangladesh.* Lancet (London), 2(7976), 10 Jul 1976, 86-89. Engl. 12 refs.

A 1975 study of a cholera-prevalent area in Bangladesh examined the relation between water use and diarrhea. Census data and hospital records for 88 families were

studied retrospectively for 11 years and were correlated with 2 days observations at water sources. People using them were identified and interviewed. Results indicated that most people used the wells for drinking water, in spite of the bad taste and discolouration caused by iron pipes. On the other hand, they obtained water for bathing, food preparation, and washing from contaminated surface sources such as tanks, rivers, canals, and ditches whose use was perpetuated by religious and social traditions. Distance from the wells was not a factor in well use, nor was education or wealth, although the last two were related to personal hygiene, nutritional status, and living space. All classes used both wells and surface water, and the incidence of diarrhea did not differ significantly in any class or group. The authors conclude, therefore, that education and public health programmes must convince the people to use well water for all their needs before wide-scale construction of wells will be effective in controlling infectious disease. (ES)

- 2064 Mackay, D.M.** *Effects of civil war on the health of a rural community in Bangladesh.* Journal of Tropical Medicine and Hygiene (London), 77(6), Jun 1974, 120-127. Engl.

The effects of the Bangladesh Civil War (1971) on the health of the population of a large tea plantation are studied by means of a comparison of statistical data from the 5 years prior to the war (1966-1970) with those available in 1972. The principal effects of the war on the plantation population included the following: large temporary migration to India; wage arrearage; difficulty in obtaining fresh grains; general tension; shortage of medical staff and supplies; and interruption of preventive programmes. Death rates — particularly among under-fives — were found to have increased while birthrates dropped; this did not, however, lead to a significant decrease in population. Although the overall disease rate was not significantly altered, deaths due to anaemia, tuberculosis, malnutrition, childbirth, and bacillary dysentery increased, the last reaching epidemic proportions among those returning to the plantation during the year following the war. A malaria increase was only partially attributed to the civil war. Losses in working time doubled. It is concluded that the war had a profound short-term effect on community health, severely setting back progress toward better health standards noted during the previous 5 years. (HC)

- 2065 Maloney, W.F.** *Tufts comprehensive community health action program.* Journal of the American Medical Association (Chicago), 202(5), 30 Oct 1967, 109-112. Engl.
Sixty-third Annual Congress on Medical Education, Chicago, Ill., 13 Feb 1967.

In 1965, the Tufts University medical school in Massachusetts (USA) established a community health centre in an urban ghetto and planned a second facility in the poverty-stricken rural south. The health centre, which was the sole health facility in a housing development of 6 000 residents, comprised an emergency room, X-ray

and laboratory rooms, a pharmacy, consultation and conference rooms, and a play area. It was open daily for 24 hours and was staffed by a large number of professionals and subprofessionals organized into groups to give comprehensive family-centred care. Staff shared information on physical, mental, and social problems within each family; established family health programmes; and implemented them. Because the community was a defined population, the centre provided a living laboratory for research into mortality, morbidity, and social deviation; it also proved to be a valuable teaching establishment where medical students could participate in family care on a basis not possible in the closed world of hospital internship. (ES)

- 2066** Mata, L.J., Behar, M. *Malnutrition and infection in a typical rural Guatemalan village: lessons for the planning of preventive measures.* Ecology of Food and Nutrition (London), 4(1), 1975, 41-47. Engl. Refs.

A long-term study of newborns in a Guatemalan village indicates that birth weight is directly related to a child's chances for survival and development in the first 4 years of life. It also suggests that birth weight may be a more important factor than socioeconomic conditions. From 1964 to 1971, 323 newborns were followed up for postnatal growth and illness. During this period more than half the infants with birth weight under 2 100 g died in the first year of life, whereas those born with a birth weight of plus 2 900 g survived even the critical weaning period. Evidence suggests that low birth weight is due to infection of the mother during pregnancy or to inadequate maternal nutrition; it is recommended, therefore, that efforts be made to protect against both. (AC)

- 2067** Minde, K.K. *Child psychiatry in East Africa: some lessons learned.* East African Journal of Medical Research (Nairobi), 3(3), Jul 1976, 149-159. Engl. 31 refs.

This study, conducted in 1971 in Uganda, examines the diagnoses, treatment, family backgrounds, school achievements, and socioeconomic conditions of urban and rural children suffering from psychoses, and it compares the results of treatment with the results in a matched, untreated sample. The study population included a sample of 100 children, aged 1 to 15 years, who attended a clinic in Kampala; 48 children from rural, semiurban, and urban communities; and 36 untreated children from the same communities. The results, which appear in charts and graphs, indicated that psychiatric symptoms common to the developed world are also present in Third World countries, but very few cases required intensive care. Treatment regimens included teaching sessions, counseling, and where necessary, medication; success of treatment was proportionate to the involvement of the child's guardians. Recommendations are that teachers and health personnel receive training in identifying psychological distress in children so that they may work together for the identification, care, and cure of child psychopathology and family maladjustment. (ES)

- 2068** Moffat, W.M. *Maintaining immunization coverage among pre-school children following a comprehensive mass immunization programme in the Ankole district of Uganda.* In Gould, G.C., ed., *Health and Disease in Africa: the Community Approach*, Nairobi, East African Literature Bureau, 1971, 221-225. Engl.
Seventeenth Annual Scientific Conference of the East African Medical Research Council, Nairobi, 1970.

A mass immunization campaign in Ankole district, Uganda, which was initiated in 1965 and was later integrated into general health services, effectively lowered incidence rates of tuberculosis and smallpox. The campaign, which comprised immunization against tuberculosis, polio, smallpox, diphtheria, pertussis, and tetanus, aimed to protect the estimated 150 000 under-fives who lived in the district. It incorporated mobile vaccination teams and regular clinic immunization. At the end of 2 years, two-thirds of the preschoolers received BCG and smallpox immunizations, and about two-thirds of these completed DPT and polio schedules. At this time, mobile teams were expanded to include maternal child health workers and medical auxiliaries so that primary health care could be provided along with immunization. Later surveys, undertaken 2 years after the change was introduced, indicated that reattendance figures had improved and previous immunization levels had been maintained. One survey was conducted by mass campaign officials and the other by the World Health Organization. Although samples were different, the results were similar and encouraging. (AC)

- 2069** Mott, F.L. *Some aspects of health care in rural Nigeria.* Studies in Family Planning (New York), 7(4), Apr 1976, 109-114. Engl.

Two surveys of 395 women between the ages of 15 and 49 in the Ibo village of Ebendo, Nigeria, revealed the high fertility, mortality, and fetal wastage rates typical of a young population. In 1973, data were collected on these subjects as well as the women's attitudes toward family planning and fertility decision-making between husband and wife. This 1973 survey was followed in 1974 by a reinterview on health and health care for the purposes of examining patterns of health care and the general physical well-being of the community. This second survey also aimed to determine questions that could be asked by nonmedical interviewers and that would provide useful information for a health team interested in developing a health programme in the community. With regard to this programme, the following conclusions were drawn: fertility counseling should include subfertility counseling for women who fail to achieve the desired family size of approximately 10 children; even minimal charges for health services tend to discourage their use since traditional medicine is available free of charge or for a nominal fee; and younger women tend to be more receptive to family planning, which should be female-oriented in the context of this particular village. (RD)

2070 Mugagga, C.L. *Evaluation study of three mobile young child clinics in a defined area of Kasangati Health Centre.* Kampala, Makerere University, 1973. 60p. Engl. 21 refs.

Unpublished document: dissertation for Diploma in Public Health.

A survey to evaluate three mobile young child clinics in Uganda revealed that fewer than half the eligible children attended the clinics, immunization rates were low, and malnutrition was less prevalent among attenders. The study population, which included 217 children under 5, was 118 families with easy access to the clinics. Families were interviewed, and the children were weighed and examined. The results indicated that 53.5% of the sample children were not clinic attenders; the main reason given for not attending clinic was that "one goes to a clinic only when one feels unwell." The author recommends that this attitude be countered by a more intensive health education and home visiting campaign and that food supplements be used as incentives for parents to bring their children to the clinic. At present, clinics are not achieving their aims of providing nutritional and preventive care to large numbers of children, and although they are not expensive to run, their cost in terms of benefit is still high. Data gathered in the course of the study are set forth in 19 tables. (HC)

2071 Namboze, J.M. *Rural nutrition rehabilitation project at Kasangati Health Centre.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 19(1), Mar 1973, 45-52. Engl.

Nutrition rehabilitation, as practiced at Kasangati Health Centre, Uganda, aims to improve the physical health and nutrition status of the child suffering from protein-calorie malnutrition, to improve health and social conditions in the family, and to educate the mother against future incidence of malnutrition. Rehabilitation, which takes place at the health centre, is conducted by a nurse trained in health education. The nurse makes appointments with mothers, demonstrates the preparation of various protein food mixtures, keeps a daily record of type and amount of food consumed, records the child's weekly weight gain, and records the mother's response to the education given her. After three or four visits, the mother begins to prepare the food herself under the supervision of the nurse; later, she brings in raw food from her garden or the market and prepares it under supervision. Meanwhile, a health visitor takes a full medical, dietary, and social history of the child and visits the home. When the child's progress is deemed sufficient by the medical officer, child and mother are referred to the young child clinic. Follow-up consists of fortnightly and, later, monthly visits to the clinic. Six case histories are cited to illustrate the most common problems leading to kwashiorkor: poverty, lack of knowledge, early weaning, family breakdown, lack of maternal care, etc. It is concluded that the success of the clinic is due to the combination of education and treatment and the constant contact with

the family; unsuccessful cases are usually due to "serious family disturbances meriting the skills of professional social workers." (HC)

2072 Namboze, J.M. *Maternal and child health services at Kasangati health centre, 1965-1967.* Kampala, Makerere University, School of Medicine, Preventive Medicine Publication No.5, 1968. 13p. Engl.

From 1965-1967 Kasangati Health Centre recorded the number of women attending its antenatal clinic, stage in their pregnancy, and their health status. Results indicated a steady increase in the number of persons attending the clinic and those giving birth in the six-bed maternity unit. Most of the women attending were between 20 and 30 weeks gestation; however, the secundigravidae were more likely than the others to attend during 10-20 weeks gestation. The schedule for the attendees was group health education, registration, determination of blood pressure, weight and height measurement, and laboratory investigation. The group health education, which was given by the clinic midwife, covered the importance of attending antenatal, postnatal, and young child clinics, danger signs during pregnancy, diet for pregnant and nursing mothers, labour signs, etc. Laboratory investigations included serology, packed-cell volume determination, and urinalysis. Despite intensive health education about immunizations, follow-up of children indicated that only about a third attended young child clinics and that of these only about 50-60% were brought back for second DPT and polio shots. The number decreased even further for third shots and boosters. (AC)

2073 Neumann, A.K., Ofosu-Amaah, S., Ampofo, D.A., Nicholas, D.D., Asante, R.O. *Integration of family planning and maternal and child health in rural West Africa.* Journal of Biosocial Science (London), 8(2), Apr 1976, 161-173. Engl. 32 refs.

Since 1970, the Danfa rural health and family planning project in Ghana has been investigating the hypothesis that family planning services are most effective when combined with other basic health services. Initial results support the hypothesis. The study population has been divided into four sections — the first receives care from a health centre and satellite clinics and is serviced by mobile health education and family planning teams; the second receives the benefit of the mobile teams; and the third, simply the family planning team; the fourth serves as a control. Health surveys, one of which was undertaken before the programme was initiated, are planned for every 2 1/2 years, and the first survey indicated that 50% of children between ages 1 and 3 suffered from first- and second-degree malnutrition. Health education activities, therefore, have focused on child nutrition. The family planning team, which served the three sections, found that for every woman accepting family planning from autonomous family planning programmes, two accept from programmes that combine health education with family planning,

and five accept from programmes that combine comprehensive maternal child health services with family planning. (AC)

- 2074 Nordberg, E.** *Self-portrait of the average rural drug shop in Wollega province, Ethiopia.* Ethiopian Medical Journal (Addis Ababa), 12(1), Jan 1974, 25-32. Engl.

Licensed drug shopkeepers in Wollega Province, Ethiopia, were surveyed to determine their prescribing practices and the size of the population they serve. A form, which sought information for a 2-week period in March, included spaces for numbers of patients (new and repeat), diagnoses, kind and amount of drugs sold, and fees paid by consumer. The qualifications of the drug shopkeeper and the availability of additional health services were also ascertained. Questionnaires were sent to all the drug shopkeepers in the province (84), and 25 of the most complete responses were chosen for study. Results showed that the drug shopkeepers, who were mostly advanced dressers (trained auxiliary health personnel), treated up to 525 000 persons yearly. Despite legislation against selling antibiotics and other potent pharmaceuticals in drug shops, sulfonamides and antibiotics constituted a very substantial portion of the sales. Although the margin for error in diagnosis was high, the patterns of disease approximated those reported by the basic health services throughout the province. Gonorrhea, however, was reported to be substantially higher. Recommendations from the study included the introduction of training in diagnosis for drug shopkeepers, provision of adequate drug supplies to keepers, and changes in legislation to reflect reality. (AC)

- 2075 Pathmanathan, I.** *Study of current infant feeding practices in rural North Malaysia as a basis for determining needs in nutrition education.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 6(3), Sep 1975, 402-406. Engl.

A study of infant feeding practices in a rural district of North Malaysia revealed that approximately 75% of the study group was wholly or partially breast-fed, modified powdered milk being the milk food of most of the others. Random samples of 46 children, aged 3 months, and 49 children, aged 6 months, were located and their mothers interviewed. Results indicated that all the children received milk in some form and that semisolids were introduced early in the form of commercial prepacked cereals. No infants received only home prepared foods. In circumstances such as this, where a beneficial tradition like breast-feeding might be at risk of losing popularity in the face of socioeconomic development in the community, it is suggested that education in infant nutrition should be devoted to preserving breast-feeding. Nutritional studies such as this are simple methods to monitor practices and to identify health education needs. (AC)

- 2076 Purohit, C.K., Sharma, R.** *Study of general health status of persons aged 60 years and above in*

rural health training centre areas, Naila. Indian Journal of Medical Research (New Delhi), 64(2), Feb 1976, 202-210. Engl. 21 refs.

A study was carried out to determine health status of aged persons in 29 (50%) villages served by the rural health training centre, Naila (India). The study group included 374 persons over age 60 (207 men and 167 women), who were all examined clinically and interviewed. The mean weights of aged men and women were 41.5 kg and 37.2 kg respectively, and mean heights were 154.0 cm and 150.5 cm. Both weight and height decreased with age. The survey revealed all persons suffered chronic ailments, and 43 persons were acutely ill. Main causes of illness were chronic bronchitis, anaemia, constipation, cataract, periodontal disease, osteoarthritis, hypertension, avitaminosis, and corneal opacity. Eighty-five (22.72%) persons were disabled because of difficulty in walking and standing, partial and complete blindness, partial deafness, abnormal involuntary movements, and other causes. (Modified author abstract.)

- 2077 Rao, D.H., Satyanarayana, K., Vijayaraghavan, K., Sastry, J.G., Naidu, A.N., Swaminathan, M.C.** *Evaluation of the special nutrition programme in the tribal areas of Andhra Pradesh.* Indian Journal of Medical Research (New Delhi), 63, 5 May 1975, 652-660. Engl.

In 1970, the Government of India initiated a country-wide supplementary feeding programme, organized under the aegis of the ministry in charge of social welfare. The programme was based on use of locally available foodstuffs, and the recipes provided 8-10 g of protein and 300 calories. An evaluation of the programme was undertaken, and the nutritional status of a sample of 1 201 supplemented and 707 unsupplemented children was assessed. Fewer children receiving supplements showed signs of protein calorie malnutrition and, within each community, the growth of supplemented children was superior to that of unsupplemented children. These results suggest that the special nutrition programme was a success, despite administrative problems that had required correction in the middle of the programme. (Modified journal abstract.)

- 2078 Ronaghy, H.A., Zeighami, B., Zeighami, E., Nayeri, F.** *Insertion of IUDs by rural midwives in Iran.* Public Health Reports (Rockville, Md.), 90(6), Nov-Dec 1975, 498-501. Engl.

Since 1965, traditional midwives in Iran's rural areas have been providing family planning education, inserting IUDs, and performing routine pelvic examinations. They have received 2 months training at an urban training centre and then have been assigned to a health corps station. Although they have access to a physician, they act without direct supervision. A recent study that compared their performance with that of physicians or physician-supervised midwives in an urban clinic indicated that the village midwives attained in their clients an IUD retention rate similar to that of the professionally trained personnel. Statistical data from the study are presented in five tables. (AC)

- 2079 Rosselot, J.V.** Pan American Health Organization, Washington, D.C. *Problems affecting the maternal and child health and family planning programmes in Central America.* In Nursing and Midwifery in Health and Population Dynamics, Washington, D.C., Pan American Health Organization, Scientific Publication No.PD/S1, 1970, 59-74. Engl.

See also entry 1848.

The problems of maternal and child health in Central America and Panama are analyzed, emphasizing the high rates of maternal and infant mortality. The effects are claimed to be underdevelopment, inefficiency, and accelerated population growth. A programme of maternal and child health protection to be implemented under the national health plan is outlined. This programme includes fertility control activities and aims at motivating 20% of women of childbearing age to accept family planning. The proposed goals require a national operation as well as direct community and international cooperation.

- 2080 Sayegh, J., Green, L.W.** *Family planning education: programme design, training component and cost-effectiveness.* International Journal of Health Education (Geneva), 19(1), Jan-Mar 1976, Suppl., 1-20. Engl. 37 refs.

Training for family planning educators was considered the most crucial element of a project in Lebanon to evaluate family planning education. The course lasted 10 days, and its objectives included providing trainees with the information and skills to state the purpose and philosophy of family planning and the educational programme; to identify the nurse's role in education; to identify and demonstrate methods of establishing rapport with mothers; and to exhibit knowledge of reproduction and contraception. Study time was split equally between theory and practice. The trainees were to provide family planning advice to new mothers during their inpatient care after childbirth and later during their postpartum checkup. The frequency with which these women accepted family planning measures was followed up and compared with that for a control group. Results revealed that 33.8% of the women who had family planning education accepted contraception compared to 18% of the control group. Cost-effectiveness of the programme is discussed, and a breakdown of the training programme is appended. (AC)

- 2081 Scheiber, P., Braun-Munzinger, R.A., Southgate, B.A., Agbo, K.N.** WHO, Geneva. *Epidemiological application of a new onchocerciasis field technique; some preliminary results.* Geneva, WHO, 1976. 6p. WHO/ONCHO/76.121. Engl. 10 refs.

A new membrane filter concentration technique for the detection and quantification of *Onchocerca volvulus* microfilariae in skin-snips was compared for sensitivity and efficiency with a widely used "standard" technique. A field study was carried out in five villages in an onchocerciasis-endemic area situated to the northeast of the town of Sokode, Mo river valley, Togo. Application

of the new technique resulted in a substantial elevation of observed microfilarial prevalence and densities. (Author abstract.)

- 2082 Shah, P.M., Khare, R.D., Rane, A.V., Bhalarao, V.Y.** *Bangle as a tool for assessing malnutrition of under-sixes.* Indian Journal of Nutrition and Dietetics (Coimbatore), 13(5), May 1976, 148-152. Engl. 11 refs.

A study in India to evaluate the bangle (bracelet) as a tool for assessing malnutrition found that the bracelet was easy to obtain and simple to use but not reliable. The study population was a group of 713 children under 6 years from 70 villages. From 14-17 March 1975, interviewers visited the children's homes, ascertained their ages, weighed them, and slid the bangle up their arm to the point at which it could go no further. It was hoped that the bangle would pass easily to a certain range in severely malnourished children; however, weight and age measurements indicated that, while it could be passed over the elbow of all severely malnourished infants, it could also be passed over the elbow of almost half the normals and the mildly malnourished infants. Similar results were found in 1-year-olds and those from 2-6 years. (AC)

- 2083 Shakir, A.** *Arm circumference in the surveillance of protein-calorie malnutrition in Baghdad.* American Journal of Clinical Nutrition (Bethesda, Md.), 28(6), Jun 1975, 661-665. Engl. 18 refs.

Three methods for detecting malnutrition in children under age 5 were compared, and results suggest a high correlation in their relative reliability. A group of 777 Baghdad children aged 3-72 months were investigated to obtain their mid-upper arm-for-age status, and the results were expressed as percentages. Then, these percentages were correlated with the Boston (USA) weight-for-age standards, which were also expressed as a percentage. These two measurements correlated at 0.92 (p.0.001). The percentage weight for age for each child could be predicted within plus or minus 16%. A constant arm circumference of 16.5 cm was suggested for use in children aged 13-72 months, when precise age is unknown. This standard seems to serve as well as the arm-for-age standard and is age independent. The constant arm standard is probably as satisfactory as that of weight for age and has many practical advantages, especially under field conditions. Methods of measuring arm circumference were developed that could be used by auxiliaries. (Modified author abstract.)

- 2084 Simons, J.** *Indigenous midwife in Asia: supporter or opponent of family planning?* IPPF Medical Bulletin (London), 9(5), Oct 1975, 1-3. Engl. 16 refs.

Experience from projects to involve traditional birth attendants (TBAs) in family planning programmes indicates that TBAs are only minimally effective in recruiting contraception acceptors. Although the data are difficult to interpret, few programmes have been able to

report figures better than one IUD acceptor per month. Studies have been undertaken in India, Pakistan, the Philippines, Malaysia, Indonesia, and Thailand; and although Malaysia has had the most encouraging results (two family planning acceptors per month), most of the countries feel justified in involving TBAs at least enough to guarantee their passive support. (AC)

- 2085** **Srivastava, P.K.** *Acceptance of sanitary composting in rural areas: case study.* Indian Journal of Public Health (Calcutta), 13(1), Jan 1969, 30-35. Engl.

In a 95-household village of India, an intensive education campaign was undertaken to promote use of sanitary composting. Follow-up study indicated the campaign was only partially successful: of the 39 households that eventually adopted the compost pit, the numbers that regularly covered the refuse were negligible. Size of household, distance to pit, and agricultural need for manure were important factors in the decision to implement a compost pit. Since women and children constituted the labour force, large families more readily adopted composting, and persons with large land holdings and the need for manure were more apt to compost. It was noted that the tradition of heaping refuse in various spots throughout the community was easily translated into the practice of throwing it into a pit but that no cultural base existed for covering the refuse. Health education based on an explanation of spread of disease was not successful in urging composters to cover refuse with 1-5 inches of dirt. (AC)

- 2086** **Stoeckel, J., Choudhury, M.A.** Bangladesh Academy for Rural Development, Comilla. *Fertility, infant mortality, and family planning in rural Bangladesh.* Dacca, Oxford University Press, 1973. 154p. Engl.

The Bangladesh Academy for Rural Development undertook a comprehensive study of family planning, fertility, and infant mortality in Comilla thana in 1968, and this publication presents the statistical data and analyzes the results of the study. Some significant findings are that the rate of pregnancy declined by 27% from 1958-1967; that infant mortality declined by 21% but in 1968 was still 139 deaths per 1 000 births; that knowledge, attitudes, and practice (KAP) surveys suggest a transitional period; that known contraceptive users denied practice of family planning and such underreporting might run as high as 35%; and that societal norms of desired family size (four children per couple) were still so high that mass family planning would not reduce growth rate below 2%. (AC)

- 2087** **Taylor, D.M., Mabonga, N., Masera, J.** *Initial experience with an endemic disease register.* Gwelo, Rhodesia, Gwelo General Hospital, Mar 1974. 28p. Engl.
Unpublished document.

An endemic disease register, designed and adopted by health authorities in Gwelo district, Rhodesia, has simplified patient follow-up and rationalized record keeping. The system is based on maintenance of two records

— an information card and a central record card. The information card is initiated at the patient's first visit to a local health clinic. It is a folded card, the front and back of which contain an identification number, the patient's name, address, medical history, results of physical examination, diagnoses, and progress notes. The two facing pages provide space for prescribed drugs and dosages, yearly assessments, and relevant facts to be recorded at each assessment. A simple code for recording information has been devised. The central record card is initiated when a patient attends hospital. It contains the patient's name, identification number, and address and is the record of treatment at hospital. A copy of it is forwarded to the local health clinic nearest the patient's home upon completion of hospital treatment. Catalogues based on identification number, name, and clinic provide simple access to the recorded information. Examples of ways that the card may be used are set forth. (AC)

- 2088** **University of North Carolina, School of Public Health, Chapel Hill.** *Malawi public health program: research report number 3.* Chapel Hill, N.C., University of North Carolina, School of Public Health, Department of Epidemiology, Jun 1968. 139p. Engl.

See also entries 2089 and 2090.

The third and final report on an American Peace Corps programme in Malawi focuses on the viability of the indigenous health assistant as a future programme implementer and the effectiveness of the Peace Corps volunteer in training him for the task. The report contains an outline of the programme objectives, background on the country and its existing health services, and a synthesis of the experiences and observations of both volunteers and health assistants. When the programme began, the indigenous health aides had been practicing under very demoralizing conditions — frequent transfers, impossible work loads, lack of opportunity for advancement, inadequate supervision, etc. — and they badly needed emotional as well as educational support. The Peace Corps volunteers who showed an interest in traditional culture and recognized the value of the assistants' knowledge regarding village social structure and protocol seemed able to provide that support. Both volunteers and assistants, however, were hampered by "the extreme lack of supervisory personnel both in the project itself and in the Ministry of Health." The evidence indicated that health assistants could take over the project if they were provided with proper supervision, evaluation, in-service training, and opportunity for professional advancement; volunteers who trained the health assistants were found to "function adequately, though generally not superlatively." Case histories of the relationships between volunteers and health assistants are appended. (HC)

- 2089** **University of North Carolina, School of Public Health, Chapel Hill.** *Malawi public health program: research report number 2.* Chapel Hill, N.C., University of North Carolina, School of Public Health, Department of Epidemiology, Oct

1967. 36p. Engl.

See also entries 2088 and 2090.

This is the second of three reports assessing the effectiveness of the Malawi Public Health Programme (November 1964-June 1966), an experiment in tuberculosis control carried out by American Peace Corps volunteers and indigenous health assistants. The volunteers, each responsible for approximately 1 000 people, were assigned in pairs to all 16 districts of Malawi. Before embarking on a disease control programme, they spent a month acquainting themselves with the villagers. This period was designed to build the villagers' confidence in the volunteers and to allow the latter to assess determinants of behaviour in the village with a view to introducing social change and community development. Evaluation of the programme revealed that the volunteers were highly effective in enlisting the villagers' cooperation in TB screening and treatment programmes; however, they were not able to introduce significant social change or to gather data systematically about values, beliefs, practices, social structure, etc. Three appendices are included. The first, a guide to future volunteers, anticipating questions they are likely to be asked and situations they are likely to encounter, has been prepared by two health assistants. Appendix II describes some traditional beliefs connected with tuberculosis, and Appendix III contains tables of rates of tuberculin testing per district. (HC)

2090 University of North Carolina, School of Public Health, Chapel Hill. Malawi public health program: research report number 1. Chapel Hill, N.C., University of North Carolina, School of Public Health, Department of Epidemiology, Jan 1967. 19p. Engl. 15 refs

See also entries 2088 and 2089.

This document presents and analyzes statistical data on tuberculosis prevalence in the Zomba District of Malawi. The data were gathered by American Corps volunteers participating in a programme of tuberculosis control whose specific aims were to screen the entire population for the disease and to follow up detected cases with domiciliary treatment. Prevalence of tuberculosis was high (in a population of 4.5 million, 75 000 people could be expected to require treatment); distribution of cases by age and sex, vital statistics, comparison with infection rates in other countries, etc., are set forth in 19 tables and 6 figures. The effectiveness of the Peace Corps volunteers in detecting cases was sufficiently adequate to eliminate the need for massive X-raying; their follow-up activities increased community response to the programme, mainly because of the short lapse in time between diagnosis and treatment. It is hoped that this programme will become a model for an integrated preventive and curative health programme delivered by similarly trained nonprofessionals. (HC)

2091 Varakamin, S., Muangman, D. Health problems in Thailand. Honolulu, University of Hawaii, 3 Mar 1976. 25p. Engl.
Unpublished document.

Information and statistics from various sources are compiled in this report on the current health status of the Thai people. Public health statistics indicate that the area of greatest need is maternal and child health; in 1970, only 15% of all babies were delivered by trained personnel and of every 1 000 live births, 25.5 babies died in infancy, and 2-3 mothers died during delivery. Child mortality still accounts for nearly 34% of total mortality. Malnutrition in mothers and children is widespread, as feeding priorities in rural Thai families tend to be directly related to earning capacity and a dietary intake heavy in carbohydrates (88%). A survey of the preschool population in the Northeast, conducted in 1972, revealed that 90% suffered from iron-deficiency anaemia. Problems associated with the delivery of health services are attributed to meagre governmental expenditure on public health; maldistribution of resources, particularly manpower; underutilization of rural health services; administrative inexperience; and the improper use of health personnel. These observations are substantiated by data set forth in nine tables and two figures. (HC)

2092 Viteri, F.E., Torun, B. Ingestion calorica y trabajo fisico de obreros agricolas en Guatemala. (Calorie intake and physical work among farmers in Guatemala: effect of food supplementation and its place in the health programs). Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 78(1), Jan 1975, 58-74. Span. 26 refs.

The contribution of proper nutrition to agricultural productivity is demonstrated by this 3-year study of two groups of Guatemalan farm workers. One group of labourers, who ranged in age from 17-57, received a food supplement of 5.5 g of protein and 250 calories twice a day, 6 days a week, for 3 years prior to the testing period. The control group, aged 17-25, ate the normal local diet. Other factors such as environment and type of work performed were very similar. The men were tested to determine food consumption, body measurements, body composition, oxygen consumption, water retention, endurance, energy output required for various tasks, changes in body weight during the testing period, etc. The results indicated that the supplemented group, regardless of age, traveled to and from work in less time, accomplished the same amount of work, and needed less sleep than did the control group. Also, they engaged in physical activities not directly related to work. The investigators concluded that the worker's diet directly affects his production and that improving it may contribute to the general development of his community. Therefore, the authors recommend that better nutrition for agricultural workers be given high priority in national planning. Statistical data are included. (RD)

2093 Wakatsuki, T. Development of rural medicine in Japan. In Kuroiwa, H., Nagata, H., Noda, K., Uchida, A., Matsushima, S., Terashima, S., Kobayashi, M., eds., *Rationale for Rural Medicine: an Asian Experiment*, Usuda, Japan, Asian Congress of Rural Medicine, Feb 1974, 19-32.

Engl.

First Asian Congress of Rural Medicine, Usuda, Japan, 24-27 Oct 1973.

See also entry 1519.

Past and present health problems peculiar to the Japanese farmer are described in some detail. Prior to the 1950s, these problems were related to poverty, overwork, and insanitary conditions. Malnutrition, intestinal parasitism, premature senility, and a chronic fatigue syndrome known as *nofushu* were prevalent. Also the farmers' belief that one loses face by seeking medical treatment compounded the problems and had to be overcome before treatment could be instigated. After 1950, Japan's policy of intensive economic growth spawned a new set of diseases — those related to chemical pollution of the environment, the utilization of dangerous farm machinery, and the phenomenon of "pseudo-modernization" (a combination of social upheaval and rising expectations). Now, the demand for medical attention exceeds the numbers of physicians to fulfill it. The approaches of the Japanese Association of Rural Medicine in overcoming these problems are discussed throughout. Statistical data illustrating the causes of morbidity and mortality are set forth in eight tables. (HC)

- 2094 Wakatsuki, T.** *Medical service in rural communities: culture and health in agricultural Japan.* Nagano, Japan, Saku Central Hospital, n.d. 27p. Engl. 12 refs.

Despite improved living standards and marked reductions in infant mortality and infectious disease, the Japanese farmer still suffers from a number of conditions peculiar to the agricultural sector. Excessive work, insanitary living conditions, and inadequate nutritional intake all contribute to a state of chronic ill health known as *nofusho*, or "Japanese farmers' syndrome"; toxic pesticides, dangerous farm machinery, and extensive use of vinyl greenhouses constitute occupational hazards. The farmers' traditional attitude toward sickness — that of stoic endurance — militates against their seeking treatment before it is too late. In 1959, a total village health control scheme, consisting of yearly mass examinations and regular report meetings (doctors and villagers), was begun in Yachiho, Nagano Prefecture. The results after 10 years operation were threefold: lowered prevalence of untreated disease and fewer deaths from belated treatment; lowered health expenditure; and the emergence of a clear correlation between the farmers' living conditions and state of health. The farmers' health consciousness, however, was not particularly enhanced by the experience: although they now possessed greater medical knowledge, their motivation toward better health had not increased. Data gathered during the 10-year period are graphically illustrated in 17 figures. (HC)

- 2095 White, G.F., Bradley, D.J., White, A.U.** *Drawers of water: domestic water use in East Africa.* Chicago, University of Chicago Press, 1972. 306p. Engl. Refs.

An overview of the availability and use of water in East Africa is presented; it comprises nontechnical aspects of economics, health, engineering, and political and social theory. It incorporates a review of the literature and the results of a survey of 34 rural and urban sites throughout East Africa — 19 of which had no piped water connections. The survey sought data on terrain, precipitation, land use, population density, type of water supply, predominant ethnic group, water source, and patterns of use. At each site, interviews were conducted with members from approximately 20 households. Students from the University of East Africa were selected to perform the interviews and were given a period of training that included role playing, sample interviews, etc., to ensure similar methods. For purposes of comparison in this publication, types of water supply are divided into (0) no improvement, (1) individual improvement, (2) group improvement, (3) rural pipeline, (4) municipal standpipe, (5) single tap, and (6) multiple tap; service and capital costs for each type are calculated, as are the caloric expenditures for fetching the water from each one. Diseases that are caused by impure or insufficient water supply are discussed in terms of morbidity, mortality, and productivity, and government policy is examined. Statistical data are tabulated, and illustrations, which depict actual events, are interspersed throughout. (AC)

- 2096 WHO, Geneva.** *Evaluation of family planning in health services: report of a WHO expert committee.* Geneva, WHO Technical Report Series No.569, 1975. 67p. Engl., Span.

Evaluation, defined by a WHO expert committee, is a "process for making judgments about selected objects and events by comparing them with specified value standards for the purpose of deciding among alternative courses of action." Complete evaluation should progress systematically and include evaluation of need, evaluation of plans or design, evaluation of performance, evaluation of effects, and evaluation of impact. In the past, evaluative studies of family planning in health services have been marked by inconclusive results and narrow objectives. On the one hand, the evaluation process has not been clearly defined, and on the other, the process has not been linked with alternatives for action. In future, evaluation topics should be chosen on the basis of management interests and actions. The procedures for evaluation should be designed to provide the quantity of information needed on the topics; then the findings from the procedures should indicate the proper course of action. Measures for evaluation should allow an administrator to "establish logical linkages between the principal resources, services, and results of family planning"; they may include maternal mortality, pregnancy complications, abortion complications, foetal mortality, perinatal mortality, child mortality, birth weight, recruits to family planning services, referrals, etc. Detailed guidelines for the evaluation of family planning in health services are annexed. (AC)

- 2097 Wurapa, F.K., Belcher, D.W., Neumann, A.K., Lourie, I.M.** *Approach to illness measurement in a rural community: questionnaire sample survey of households in the population of the Danfa comprehensive rural health and family planning project in Ghana.* Ghana Medical Journal (Accra), 13(2), Jun 1974, 98-105. Engl. 20 refs.

The major findings of a 1972 survey conducted by the Danfa comprehensive rural health and family planning project to determine the pattern of illness in rural Ghana were that a striking preponderance of infectious and parasitic diseases existed in children; that symptoms of chronic conditions increased with age; and that the incidence of illness and disability other than pregnancy complications was higher among women than among men. Twelve thousand individuals from randomly selected households containing at least one fertile female and one child under 5 were interviewed to determine their medical histories for the 2 weeks prior to the beginning of the survey. Plans are to compare the results of the completed questionnaire with results of a later full-scale health examination survey of the same population. The Danfa project has undertaken this and other surveys for the purpose of generating information for health planning, providing data for evaluating rural health and family planning programmes, and developing field survey procedures. Statistical data are included. (RD)

- 2098 Yankauer, A.** *Evaluation of nutrition classes for mothers in a pediatric clinic setting.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 21(2), Apr 1975, 90-92. Engl.

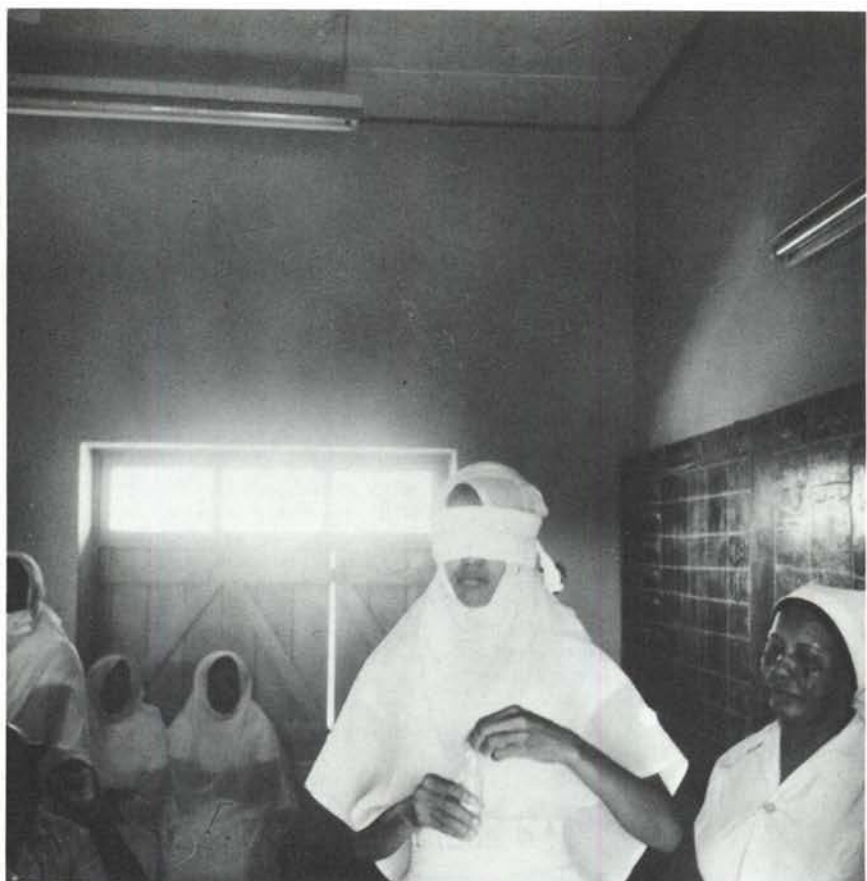
The primary purpose of this report is to show that a simple field study can be carried out as part of routine clinic practice and that it can yield useful results affecting clinic operation. At a pediatric clinic in Madras (India) public health nurses held weekly nutrition group meetings for mothers of severely malnourished children with emphasis on the use of roasted Bengal grams as a protein food supplement. Each mother attended one meeting, but many failed to follow the nurse's advice. A follow-up survey indicated a direct relationship between weight gain in children aged 18 months and over and the extent to which their mothers supplemented their diets. Some weight gain was also apparent in children under 18 months, but fewer of these children had been introduced to solid foods, so it was more difficult for their mothers to include grams in their menus. As a result of this study, mothers of children under 18 months were no longer invited to the nutrition meetings. Statistical data are included. (RD)

- 2099 Yanochik, A.V., Eichelberger, C.I., Dandoy, S.E.** *Comprehensive nutrition action program in Arizona.* Journal of the American Dietetic Association (Chicago), 69(1), Jul 1976, 37-43. Engl. 31 refs.

A programme to improve nutritional status of residents in three counties of Arizona (USA) was launched in 1970; its success prompted the expansion of coverage to include the entire state. The programme introduced a cadre of community nutrition workers who undertook screening and provided the link between nutritionists and the people at risk. A total 4 899 persons, of whom 90% were under age 5, were screened initially for haematocrit and haemoglobin values, and height and weight. Of the total population, 1 311 were found to be at risk and were interviewed by nutrition workers using a questionnaire. Dietary patterns were thus established, and socioeconomic factors were brought to the attention of professional nutritionists who could then design nutrition care plans. Of these, 1 800 included referrals to other agencies who were equipped to intervene in socioeconomic problems. The community nutrition workers monitored progress and effectiveness of the nutrition plans. Improvement, which was defined as behavioural change resulting from the nutrition intervention, was noted in 50% of families followed. Excessive milk intake was reduced, and satisfactory levels of protein consumption were attained. Anaemia, which affected 25% of the population initially, was alleviated in all but 7%. (AC)

- 2100 Zeighami, E., Zeighami, B., Eftekhari, A.E., Khoshnevis, P.** *Effectiveness of the Iranian auxiliary midwife in IUD insertion.* Studies in Family Planning (New York), 7(9), Sep 1976, 261-263. Engl. 14 refs.

A study in Iran that compared the performance of traditional midwives with that of clinic personnel (physicians and nurse-midwives under physician supervision) suggests that auxiliaries with minimal training (2 months) can insert IUDs safely and can elicit retention rates similar to those of more highly trained individuals. Records for 464 women who received IUDs between 1970 and 1975 were followed up; one half had attended rural midwives (four midwives in Fars Province) and the other half, a clinic in the province. The two groups were matched for age and parity. Data on women who had returned to the clinic or the midwife for removal of the IUD were collected from inserter records, and all the other women, whose IUD status was unknown, were interviewed. If a woman reported that she no longer used the IUD, the reason and time for removal were ascertained. In cases where the interviewers had some doubt, a pelvic examination was performed. More than half of the removals for both groups were identified in these visits. The overall results were almost identical - 24.8 per 100 users terminated midwife insertions and 25.4 per 100 users terminated clinic insertions. The rates of removal for medical reasons and expulsion without replacement were somewhat higher for midwife insertions, but removal rates for accidental pregnancy and for personal reasons were higher for the clinic. In neither group were any cases of uterine perforation or severe haemorrhage observed. (AC)



Illiterate nursing students learn to identify drugs by taste in the Sudan.

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