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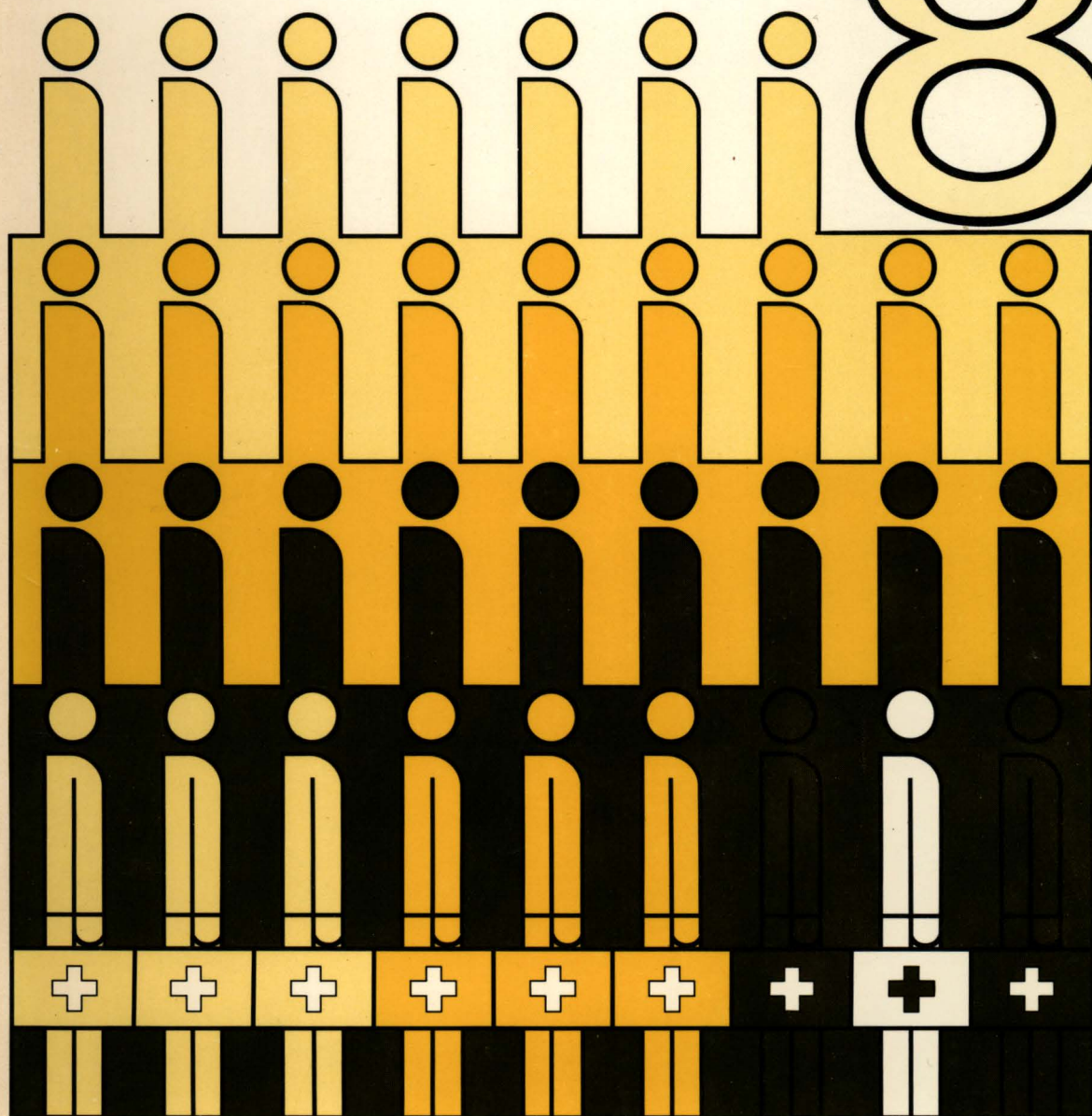
SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

Editor: ROSANNA M. BECHTEL

VOLUME

8



SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

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Volume 8

Editor: Rosanna M. Bechtel

**Abstracts written by: Rosanna M. Bechtel, Hope Cadieux-Ledoux, Anita Firth,
Frances Morgan, and David Paul-Elias**

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

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Preface

In this volume of SALUS we introduce new chapter headings and make changes in old ones. Users familiar with the old headings will note the addition of chapters on appropriate technology, occupational and physical therapists, and health educators. Some anomalies of classification have been corrected, i.e., except for teaching aids, all the subsections in Chapter IV on health workers now refer to categories of persons rather than types of care, and, wherever possible, chauvinistic terms such as "manpower" and demeaning expressions such as "nonprofessional" have been replaced by appropriate substitutes.

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As always, I would like to thank Mrs Anita Firth and the other indexers for their help in the preparation of this volume.

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Abbreviations and Acronyms

AID — Agency for International Development	Span — Spanish
BCG — Bacillus Calmette-Guerin vaccine	UK — United Kingdom
d — day	UN — United Nations
DDT — dichlorodiphenyltrichloroethane	UNCTAD — United Nations Conference on Trade and Development
DPT (DTP) — diphtheria-pertussis-tetanus vaccine	UNESCO — United Nations Educational, Scientific and Cultural Organization
Engl — English	UNICEF — United Nations Children's Fund
Fren — French	UNIDO — United Nations Industrial Development Organization
g — gram(s)	US (USA) — United States of America
kcal — kilocalorie(s)	USSR — Union of Soviet Socialist Republics
kg — kilogram(s)	VHF — very high frequency (radio)
ml — millilitre(s)	WHO — World Health Organization
NIH — National Institutes of Health	
PAHO — Pan American Health Organization	

I Reference Works

See also: 5428.

- 4901** **Biblioteca Regional de Medicina y Ciencias de la Salud, São Paulo, Brasil. Medicina tradicional. (Traditional medicine).** São Paulo, Brasil, Biblioteca Regional de Medicina y Ciencias de la Salud, Serie Bibliográfica No. 3, May 1978. 28p. Span., Portuguese.

See also entry 4902.

This bibliography contains 337 citations on the subject of traditional medicine in Latin America. The items are listed alphabetically by author in the language of publication and are followed by a rudimentary subject index. (HC-L)

- 4902** **Biblioteca Regional de Medicina y Ciencias de la Salud, São Paulo, Brasil. Saúde materno-infantil/Salud materno-infantil. (Maternal child health).** São Paulo, Brasil, Biblioteca Regional de Medicina y Ciencias de la Salud, Serie Bibliográfica No. 1, Jun 1977, 55p. Span., Portuguese. See also entry 4901.

This document is the 1st of a series of bibliographies compiled by the Regional Medical Library of the Pan American Health Organization, São Paulo, Brazil. It contains 432 references to articles published in 61 Latin American medical journals since 1971. The citations appear alphabetically, by author, under subject headings covering the various aspects of maternal child health and are followed by author and subject indices and a list of the aforementioned journals. (HC-L)

- 4903** **Bobenreith, M.A. ed(s). Books on primary health care, 1973-1978.** Bulletin of the Pan American Health Organization (Washington, D.C.), 12(4), 1978, 372-374. Engl.

This bibliography contains titles of 46 books published from 1973-1978 on various aspects of primary health care. Each reference contains the title, the name(s) of the author(s) and publisher, the place and date of publication, paging, and the price in local currency. The titles listed have been chosen for their high-priority subject matter, variety of approaches, content quality, and original contributions concerning conceptual matters and applicable experiences. Although most of the material is in English, a few Spanish references are included. (DP-E)

- 4904** **Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris. Liste des ouvrages reçus au service de documenta-**

tion: information sexuelle; livres pédagogiques pour éducateurs. (List of books received by the documentation centre: sex education; pedagogical books for educators). Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1978. 6p. Fren.

Unpublished document.

Pedagogical guides designed for teachers of sex education are listed in this bibliography of books received at the Institute from 1976-1978. Teaching methods and aids are covered as well as information on adolescent growth and development, psychological and social factors, and the special problems of the handicapped. (FM)

- 4905** **Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris. Listes des ouvrages reçus au service de documentation: interruption volontaire de grossesse (I.V.G.). (List of books received by the documentation centre: voluntary interruption of pregnancy).** Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1978. 4p. Fren.

Unpublished document.

Books covering all aspects of abortion are listed in this bibliography of books received at the Institute as of September 1978. Medical and biological as well as religious, moral, and psychological factors are among the topics discussed. Legislation concerning abortion in the USA, the UK, and France is described in many of the books. Brief summaries of each work follow the bibliographic information. (FM)

- 4906** **Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris. Liste des ouvrages reçus au service de documentation: information sexuelle, livres pédagogiques pour parents. (List of books received by the documentation service: sex education; pedagogical books for parents).** Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1977. 7p. Fren.

Unpublished document.

Books designed to aid parents and teachers in providing sex education for children are listed in this bibliography of works received at the Institute in 1976 and 1977. Topics covered include growth and development at different ages, child and adolescent psychology, parent-child relationships, and the problems of handicapped children. A short summary of each book accompanies the bibliographic information. (FM)

- 4907 Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris.** *Liste des ouvrages reçus au service de documentation: information sexuelle; enfants.* (List of books received by the documentation service: sex education; children). Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1977. 4p. Fren.

Unpublished document.

This bibliography of books received at the Institute from 1976-1977 lists works related to sex education for pre-school and primary school children. A brief description of each book is included. Topics covered range from pregnancy and birth to sibling rivalry and boy/girl relationships. (FM)

- 4908 Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris.** *Liste des ouvrages reçus au service de documentation: information sexuelle; pré-adolescents.* (List of books received by the documentation service: sex education; pre-adolescents). Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1977. 4p. Fren.

Unpublished document.

This bibliography provides brief summaries of books received at the Institute from 1976-1977 pertaining to sex education for children aged 7-13 years. Guide books and textbooks suitable for this age group cover sexual growth and development, the reproductive system, sexual relationships, and behaviour in biological, physiological, and psychological contexts. (FM)

- 4909 Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris.** *Liste des ouvrages reçus au service de documentation: stérilité.* (List of books received by the documentation service: sterility). Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1977. 4p. Fren.

Unpublished document.

This descriptive bibliography lists books recently received at the Institute dealing with sterility and related problems. Reproductive cycles, causes and treatment of sterility in both men and women, and the psychological factors involved are among the topics covered. Medical reference books destined for doctors are included as well as works written for the general public. (FM)

- 4910 Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris.** *Liste des ouvrages reçus au service de documentation: maladies vénériennes.* (List of books received by the documentation service: venereal diseases). Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1977. 2p. Fren.

Unpublished document.

Information on venereal diseases is the subject of this bibliographic list of books received at the Institute in 1977. A total of 10 books are described, including works written for the general public and for professional health

and social workers. Epidemiological aspects, clinical examinations, treatment, and sociological factors are among the topics covered. (FM)

- 4911 Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris.** *Liste des ouvrages reçus au service de documentation: information sexuelle enseignement.* (List of books received by the documentation service: sex education). Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1977. 1p. Fren.

Unpublished document.

Among recent books on sex education received at the Institute are a 10-volume set of curriculum guides for a course in sexology. Topics covered include historical analysis of sexual customs, physiology and anatomy of the reproductive system, contraception, sex education for small children and adolescents, and comparative psychology. Other works include an introductory course in sexology for medical students and a manual for sex education. (FM)

- 4912 Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Paris.** *Liste des ouvrages reçus au service de documentation: planification familiale.* (List of books received by the documentation service: family planning). Paris, Centre d'Information sur la Vie Sexuelle, la Maternité et la Régulation des Naissances, Sep 1976. 3p. Fren.

Unpublished document.

This descriptive bibliography lists books pertaining to family planning received at the Institute in 1976. Bibliographies of resources for family planning education are given. Other topics include attitudes towards contraception, parental responsibility, and sex education. Conference reports, fertility survey results, and guides to the methodology of population surveys are among the 12 items described. (FM)

- 4913 Colombia, Ministerio de Salud Pública, Instituto Colombiano de Bienestar Familiar.** *Boletín bibliográfico e informativo.* (Bibliographic bulletin and report). Bogotá, Sistema Nacional de Bibliotecas del Instituto Colombiano de Bienestar Familiar, Oficina de Comunicaciones. Span.

For sample bulletin, see entry 4914.

Every month, the Colombian *Instituto de Bienestar Familiar* (ICBF), Bogotá, publishes a bibliography of information available from its library on one or more selected themes e.g., drug abuse, women, child nutrition and mental development, etc. Each number contains a brief presentation of the theme(s), an alphabetical listing by author of the complete citations, and a title index; occasionally, lists of the library's latest acquisitions and recent ICBF publications also appear. (HC-L)

- 4914 Colombia, Ministerio de Salud Pública, Instituto Colombiano de Bienestar Familiar.** *Bibliografía sobre educación no-formal.* (Bibliography on non-formal education). Bogotá, Sistema Nacional de

Bibliotecas del Instituto Colombiano de Bienestar Familiar, Oficina de Comunicaciones, Boletín Bibliográfico e Informativo No. 7, Aug 1978. 22p. Span. Refs.

See also entry 4913.

Publications available from the library of the *Instituto Colombiano de Bienestar Familiar* on the subject of non-formal education are listed by author and title in this bulletin. Sections dealing with community development, group dynamics, adult education, and education (family and sexual) in the home might be of interest to our readers. (HC-L)

- 4915 Harrison, E.A. ed(s).** *Health care costs: health care facilities; a bibliography with abstracts.* Springfield, Va., National Technical Information Service, Mar 1978. 242p. Engl.

This collection of 242 selected abstracts of research reports covers construction costs, operation costs, financial management, capital needs, financing, cost effectiveness, incentive reimbursement, health manpower, health insurance, and benefit cost analysis of health care facilities, including nursing homes, hospitals, and mental health facilities. Documents included range in date from December 1970-March 1978. A previous edition contained 128 of these abstracts. (Modified journal abstract.)

- 4916 Harrison, E.A. ed(s).** *Health care costs: ambulatory health care (a bibliography with abstracts).* Springfield, Va., National Technical Information Service, Mar 1978. 71p. Engl.

This collection of 46 abstracts of research reports covers medical group practices, health resources, health care facilities, rural health services, health care utilization, health insurance, chronic disease management, surgery, and community health services as related to health care costs of ambulatory care. (Modified journal abstract.)

- 4917 International Audio-Visual Resource Service, London.** *Resources list: family life and sex education selected audio-visual aids.* London, International Audio-Visual Resource Service, Jun 1975. 86p. Engl.

See also entries 4918, 4919, 4920, 4921, 4922, and 4923.

This list is a selection of audiovisual aids for use in family life or sex education programmes. Topics covered include reproduction in animals and plants, human reproductive systems, pregnancy and birth, heredity, sexuality, interpersonal relationships, morality and values, family relationships, extramarital pregnancy, and sex education and counseling. Materials are listed by medium and there are geographical and subject indices. Each entry contains a description of the item's contents, price, ordering information, date of production, language(s), etc. (DP-E)

- 4918 International Audio-Visual Resource Service, London.** *Resource list; selected audio visual aids for family planning programmes.* London, Inter-

national Audio-Visual Resource Service, Jun 1975. 108p. Engl.

See also entries 4917, 4919, 4920, 4921, 4922, and 4923.

This list is a selection of audiovisual aids for use in family planning programmes. It covers such topics as communicating family planning, materials on contraception for medical personnel and the general public, family planning and maternal child health programmes, infertility, and family planning motivation. Materials are listed alphabetically by medium and there are subject and geographical indices. Each entry contains a description of the item's contents, date of production, price, language(s), and ordering information. (DP-E)

- 4919 International Audio-Visual Resource Service, London.** *Resource list; a selection of films and other audio visual materials on abortion.* London, International Audio-Visual Resource Service, Jun 1975. 19p. Engl.

See also entries 4917, 4918, 4920, 4921, 4922, and 4923.

The materials included in this resource list are a selection of items available on the topic of abortion. They are listed by medium (film, videotape, tape, filmloop, or multimedia kit). Each entry contains a description of the contents of the item, length, production date, language(s), price, and ordering information. Many materials can also be borrowed free of charge from the International Audio-Visual Resource Service, UK. (DP-E)

- 4920 International Audio-Visual Resource Service, London.** *Resource list; films and other audio visual aids on population.* London, International Audio-Visual Resource Service, Jun 1975. 65p. Engl.

See also entries 4917, 4918, 4919, 4921, 4922, and 4923.

This list is a selection of audiovisual aids available for use in population education programmes. Materials are listed alphabetically by medium (film, multimedia kits, transparencies, slides, tapes, games, etc.). Each item is described in terms of content, length, price, ordering information, etc. Topics covered include population, the population explosion, and population control. There is a geographical index. (DP-E)

- 4921 International Audio-Visual Resource Service, London.** *Resource list; family planning films and other audio-visual aids suitable for Asian countries.* London, International Audio-Visual Resource Service, Jun 1975. 85p. Engl.

See also entries 4917, 4918, 4919, 4920, 4922, and 4923.

Each entry in this list of audiovisual aids contains a description of the item's content, its form (film, filmstrip, etc.), date of production, length, language(s), price, and ordering information. The aids deal mainly with family planning and sex and health education and are listed by country. Countries that have contributed to this list include Bangladesh, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Nepal, Pakistan, Philip-

piners, Singapore, Sri Lanka, Thailand, Taiwan, and Vietnam. (DP-E)

- 4922 International Audio-Visual Resource Service, London.** *Resource list; Africa-selected audio visual aids.* London, International Audio-Visual Resource Service, Jun 1975. 52p. Engl.
See also entries 4917, 4918, 4919, 4920, 4921, and 4923.

This list of audiovisual aids includes mainly family planning materials originating from or with specific reference to Africa. Items are listed alphabetically by medium with a full description and instructions for purchasing or borrowing. There are also subject and geographical indices. Materials include films, slides, photographs, records, posters, games, etc., and the subjects covered are abortion, communicating family planning, contraception, family planning and maternal child health programmes, reproduction, and sex education. (DP-E)

- 4923 International Audio-Visual Resource Service, London.** *Resource list: ayudas audio visuales para planificación familiar: programas para países de habla hispana.* London, International Audio-Visual Resource Service, Jun 1975. 56p. Span.
See also entries 4917, 4918, 4919, 4920, 4921, and 4922.

Family planning audiovisual materials in Spanish that may be bought or borrowed from the International Audio-Visual Resource Service, London, UK, are listed in this catalogue by subject (human reproduction/sexual education, contraception, population, etc.) and medium (films, slideshows, models, etc.). Some are intended for health workers and others for the public; all are accompanied by a brief description. (HC-L)

- 4924 Lovel, H.J. ed(s).** *Maternal and child health training material: a selected annotated bibliography for teachers of health and health-related workers in villages and peri-urban areas.* Geneva, WHO, Mar 1979. 99p. Engl. Refs.

This bibliography was prepared at WHO's request for teachers who are training community health workers in maternal child health (MCH) and family planning services. Separate sections of part 1, a description of the material by subject, cover information about: learning how to teach; planning, organizing, and evaluating specific MCH services; teaching other health workers to provide MCH services; community diagnosis; and coordination with other sectors. Entries in this section contain author, date, title, and, in most cases, a brief annotation. Part 2, an author index, also gives addresses for ordering cited documents; part 3 is a title index. Part 4

is a request to readers to help identify documents in fields that have not been sufficiently covered. (RMB)

- 4925 Oyesola, S.O. ed(s).** *Public health: educational objectives and evaluation with emphasis on developing nations including Africa; list of related references.* Lagos, University of Lagos, College of Medicine, 24 Apr 1978. 3p. Engl.
Twelfth Annual Conference, Association of Medical Schools in Africa, Lagos, Nigeria, 24 Apr 1978.

Unpublished document.

This 25-item bibliography attempts to focus attention on the problems of medical educators in Africa and other developing areas, with special emphasis on the theme of defining and evaluating educational objectives in relation to public health in the African environment. Sources for the citations include *Index Medicus* and the SALUS bibliography series. Entries include title, author, and source; there are no abstracts. (DP-E)

- 4926 WHO, Geneva.** *Appropriate technology for health directory; December 1978.* Geneva, WHO, Dec 1978. 74p. Engl.
See also entry 4211 (volume 7).

This revised directory, which contains information collected from questionnaires distributed by WHO, now lists the names and addresses of 382 organizations, institutions, and individuals from 75 countries, all of whom are involved with appropriate health technology. Entries are listed alphabetically by country; each entry contains, in addition to name and address, computer terms describing the subjects of greatest interest to that organization. There are a list of subjects and a subject index. A sample questionnaire is appended. (DP-E)

- 4927 WHO, Geneva.** *Manual of the international statistical classification of diseases, injuries, and causes of death; volume 2: alphabetical index.* Geneva, WHO, 1978. 659p. Engl.
See also entry 4212 (volume 7); also published in French, Russian, and Spanish.

This volume contains the alphabetical index to the 9th revision of the international classification of disease that appeared in 1977 as volume 1. It is intended to include all diagnostic terms in current use. Section 1 covers diseases, syndromes, signs, symptoms, pathological conditions, injuries, and other reasons for contacting health services, i.e. the kind of information that would be recorded by a physician. The terms in section 2 are not medical diagnoses but the external cause of injury (e.g. fire, explosion, submersion, etc.) and the circumstances (accident, suicide, war, etc.). Section 3 is an index-table of drugs and other chemical substances with adverse effects. (Modified journal abstract.)

II Organization and Planning

II.1 Health Workers

See also: 4950, 5266, 5268, 5289, 5290, 5296, 5297, 5301, 5312, 5372.

- 4928 Altorki, M.T.** *Establishing a medical sciences college in Saudi Arabia.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 101-109. Engl.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

For complete document see entry 4937.

Since Saudi Arabia's health care needs can best be provided for by a well-trained health team, the King Faisal University is in the process of developing a medical training complex consisting of a college of medicine and schools of nursing, dentistry, and allied health. These facilities were planned to start in sequence under a single administration; eventually, training facilities will include a teaching hospital and village health clinics. The training course for physicians lasts 7 years; for dentists, 5 years with an optional year of internship; for nurses, 3 years; and for auxiliaries, 2 years. (DP-E)

- 4929 Brasil, Ministério da Saúde. Organização Pan-Americana da Saúde, Washington, D.C.** *Padrões de assistência de enfermagem à comunidade; informe final. (Standards of community nursing services; final report).* Brasília, Ministério da Saúde, 1979. 71p. Portuguese.

Grupo de Trabalho para Elaboração de Padrões de Assistência de Enfermagem à Comunidade, Brasília, Brazil, 20 Jun-1 Jul 1977.

A working group of 26 Brazilian nurses met in 1977 to draw up standards or models for community nursing. The areas covered by these standards include identification of high-risk groups, community participation, primary care, epidemiological surveillance, planning, delivery systems, procedures, supervision, distribution of tasks, and in-service training. Each model contains a list of objectives, activities, and evaluation criteria. Annexes comprise a glossary, evaluation forms, and working group documents. (RMB)

- 4930 Brasil, Ministério da Saúde. Modelo geral de enfermagem. (General nursing model).** Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Or-

ganização Sanitária, Setor de Enfermagem, 1977. 89p. Portuguese. 10 refs.

After an examination of the nursing personnel now available in Brazil, general guidelines for nursing services in that country are presented. Job descriptions and training requirements for nurses at the central, regional, and local levels of the nursing services are described in detail. Annexes contain tables, basic legislation affecting nurses, a glossary, and a bibliography and statistical data are included in other parts of the text. (RMB)

- 4931 CARICOM Secretariat, Georgetown.** *Commonwealth Caribbean: Regional Project for the Education and Training of Allied Health Personnel.* Georgetown, CARICOM Secretariat, 1977. 1v.(various pagings). Engl.

Second Project Advisory Committee Meeting, CARICOM Secretariat, Georgetown, Guyana, 8-10 Dec 1976.

Unpublished document.

This document contains the welcoming address, agenda, reports, and recommendations of the 2nd advisory committee meeting on training allied health personnel in the Commonwealth Caribbean. The auxiliary training programmes at Barbados Community College, the Jamaica College of Arts, Science and Technology and the Jamaican Ministry of Health are described and plans for coordinating training efforts are discussed. A list of participants is included and annexes contain additional information and country reports. (RMB)

- 4932 Chang, W.P.** *Ethiopian experience in health manpower training; a review of the Public Health College.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(1), Mar 1978, 147-154. Engl. 16 refs.

Health manpower development in Ethiopia, mainly the paramedical training programmes of the Public Health College, is reviewed and discussed. The health team training programme in Gondar is the most practical and could serve as a model for other developing countries. The team approach to training and service (a team consists of a health officer as leader and supporting paramedical personnel) is a realistic and effective means of meeting the country's health manpower needs. The establishment of a definite career structure with prospects for continuing professional advancement, respectable status, appropriate authority, adequate technical supervision, administrative support, and decent working and living conditions are all important elements in the success of the programme. (Modified journal abstract.)

- 4933 Educación Médica y Salud, Washington, D.C.** *Enseñanza de la salud mental en escuelas de salud pública. (Teaching mental health in schools of public health).* Educación Médica y Salud (Washington, D.C.), 19(4), 1976, 418-422. Span.
Grupo de Estudio sobre la Enseñanza de Salud Mental en las Escuelas de Salud Pública, Caracas, Venezuela, Jun 1975.

Participants from Argentina, Brazil, Colombia, Chile, Mexico, Peru, and Venezuela attended the PAHO/WHO Study Group on Teaching Mental Health in Schools of Public Health. The following were among their recommendations: the establishment of a mental health unit within each school of public health, the incorporation of mental health content within the curricula of all professional and non-professional personnel, the development of mental health administration as a specialty within public health administration, the participation of the schools of public health in the formulation of national mental health policies, and the adoption throughout Latin America of a standardized system for gathering mental health statistics. (HC-L)

- 4934 Gandhi, H.S.** *Training and delivery of health services in rural areas and the role of administration and management.* NIHA Bulletin (New Delhi), 7(1), 1974, 22-27. Engl.

The author discusses the training of physicians and other health workers to prepare them to practice community-oriented medicine as part of a health team. This new teaching concept will require some radical changes in the traditional values of medical educators, the curriculum, and teaching methods. Many problems in the functioning of the health team are due to lack of knowledge of one's own job and functions, lack of understanding of the duties of the other team members, poor skills in human relations and the inability to get along with others, and the inability to integrate individual goals with organizational goals. Proper training in behavioural and management sciences can help to overcome these problems. (DP-E)

- 4935 Gómez de Martínez, V., Arango de Bedoya, Y., Arango de Ruales, M.E., Torres Aguirre, L.H.** Universidad del Valle, División de Salud, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); recursos humanos. (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources).* Cali, Colombia, Universidad del Valle, División de Salud, Documento No. 7, n.d. 43p. Span.
See also entries 3967, 4194 (volume 6), 5244, 5245, 5250, 5251, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5294, 5295, and 5370.

The Human Resources Unit of the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia, has developed models for recruiting, selecting, training, supervising, and evaluating personnel. The models are to be applied, experimentally, to a health service for an urban population of

100 000 and, when perfected, to the entire nation. This document explains the objectives and activities of the Unit and, with the help of flow charts, organigrams, and sample forms, the aforementioned models. (HC-L)

- 4936 Hall, T.L., Mejía, A. ed(s).** *Health manpower planning: principles, methods, issues.* Geneva, WHO, 1978. 311p. Engl.

Individual chapters have been abstracted separately under entries 5266, 5289, 5290, 5297, and 5301.

The purpose of this book is to bring together and analyze information on the various aspects of health manpower planning, set out the principles of health manpower planning as an integral part of overall health planning in the context of socioeconomic development, highlight the more common difficulties experienced in the conduct of such planning, and describe the component parts of the planning process as well as the techniques that can be used, including their potential benefits and limitations. Separate chapters cover the health manpower process, demand, supply, productivity, manpower production, manpower distribution, primary care by non-physicians, planning aspects of selected manpower categories, international migration of professional manpower, economics of health manpower planning, and manpower planning and the political process. (RMB)

- 4937 McNeur, R.W. ed(s).** *Changing roles and education of health care personnel worldwide in view of the increase of basic health services.* Philadelphia, Pa., Society for Health and Human Values, 1978. 280p. Engl. Refs.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

Individual papers have been abstracted separately under entries 3840 (volume 6), 4928, 4940, 4958, 4972, 4982, 5238, 5246, 5255, 5260, 5265, and 5268.

The introduction to this 4-part report gives a new perspective on changes in the health care field and in the role and training of health manpower. The section on studies in contemporary health care brings together a wide range of reports from a number of countries concerning changes taking place in their own systems; these changes are further analyzed in the conclusion, which also contains the results of group discussions. The summary presents a number of conclusions agreed upon by the participants in the consultation, including the need to encourage community participation in health care, emphasize preventive medicine, reorient nurses toward patient care and away from administration (since upward mobility in health careers rarely occurs), etc. A list of participants is included. (DP-E)

- 4938 Morley, D.** *Part-time health worker in the delivery of health care.* Journal of Tropical Medicine and Hygiene (London), 81(11), Nov 1978, 212-229. Engl.

Primary Health Care Seminar and Workshop, Maseru, Lesotho, 29 Jan 1978.

After describing the background of health care in devel-

oping countries, the author discusses the attributes of the village or part-time health worker and considers why many health professionals and politicians find it so difficult to accept these auxiliaries. To be successful, village health workers must be chosen by their own communities, trained close to home and with a minimal disruption of their lives, low-paid, and continuously trained and supervised. Physicians and politicians, who have a vested interest in government programmes that encourage dependency-creating handouts, paternalism, and superimposed initiative-destroying norms, must be reoriented toward community health programmes that encourage independence and self-efficiency. (DP-E)

- 4939 Organización Panamericana de la Salud, Washington, D.C.** *Actividades de desarrollo de recursos humanos de la OPS. (PAHO health manpower development activities).* Educación Médica y Salud (Washington, D.C.), 10(4), 1976, 389-415. Span.

Reprint of *Informe anual del director*, 1975, Documento Oficial de la OPS 143 (1976).

PAHO has collaborated with Latin American countries in a number of activities related to health manpower development. This paper reviews these activities under the following headings: health manpower development; educational development (i.e., curriculum changes, in-service training programmes, institutional development, advanced education, continuing education, research, and courses, workshops, and seminars); training in public health, medicine, nursing, environmental health, veterinary medicine, dentistry, health education, etc.; scholarships (also presented in tabular form); and teaching materials and resources. (HC-L)

- 4940 Rhode, J.E., Northrup, R.S.** *Mother as the basic health worker: training her and her trainers.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 139-166. Engl. 20 refs.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

For complete document see entry 4937.

A study of Indonesian health services, including some innovative programmes, reveals that there are several areas where mothers can contribute greatly to the improvement of health. These include maternal health, neonatal mortality and morbidity, diarrhea, diphtheria, pertussis, tetanus, tuberculosis, vitamin deficiency, intestinal parasites, and protein-calorie malnutrition. The design of a programme intended to train and utilize mothers in health care delivery is described. Special attention is given to target-oriented health education and teaching materials. (DP-E)

- 4941 Taylor, C.E.** *Reorientation of health personnel to meet the people's needs.* *Assignment Children* (Geneva), 42, Apr-Jun 1978, 67-79. Engl.

In order for a primary care programme to fulfill its potential for meeting the health needs of even the most

disadvantaged, most countries must reorient their health systems towards the total support of primary health care (PHC) workers, because these workers have the most influence on the population's health status. Health personnel and the community must work together to define realistically, and with consideration for cost-effectiveness, a new balance between the roles of different health workers. Middle-level and PHC workers can care for up to 90% of all illnesses, leaving physicians free for training, supervision, and the care of the 10% of patients referred to them. (Modified journal abstract.)

- 4942 UNDP, New York.** *Commonwealth Caribbean: Regional Project for the Education and Training of Allied Health Personnel, 1974-1978; report of the preparatory mission.* New York, UNDP, Dec 1973. 1v.(various pagings). Engl.

This preliminary report examines the Caribbean project on health manpower education. Chapter 1 contains background information and presents the plan and method of work. Chapter 2 studies the different levels of education and training of allied health workers, including student selection and entry requirements. Other chapters examine budgetary needs, teacher training requirements, and individual programmes for each category such as pharmacy, nursing, and public health. Chapters 6 and 7 survey existing and required facilities and equipment. Another chapter describes the administration of the project, while the final chapter summarizes the projected operational costs. (FM)

- 4943 WHO, Geneva.** *Training in maternal and child health care.* *WHO Chronicle* (Geneva), 33(9), Sep 1979, 329-333. Engl.

Also published in French, Russian, and Spanish.

Depending upon local conditions in developing countries, maternal child health (MCH) services should include antenatal and postpartum care, promotion of breast-feeding and nutrition, family planning, disease control activities, etc. Training requirements for appropriate MCH care are examined, with emphasis on the need to provide total coverage and continuity of care for mothers and children, identify and refer at-risk patients, and motivate and support families to gain self-reliance. Innovative approaches and strategies for training in MCH care are outlined and the contributions of WHO and UNICEF to national MCH programmes are discussed. (DP-E)

- 4944 WHO, Geneva.** *Training of senior public health administrators.* *WHO Chronicle* (Geneva), 33(1), Jan 1979, 30-31. Engl.

Also published in French, Russian, and Spanish.

This report of a WHO working group outlines suggestions for training programmes for senior public health administrators. A brief job description is given and recommendations are made to evaluate existing programmes and carry out research into the training and management of health administrators. The group emphasized a flexible curriculum to take into account national differences and changing health needs. Courses

should train administrators to solve community health problems and evaluate health programmes. (FM)

II.2 Organization and Administration

See also: 4994, 5015, 5182, 5253, 5335, 5382.

- 4945 Abreu, A., Werthein, L.J., Ruiz de Zarate, S., Ayrado, A.** *Dermatología en la organización de la salud pública en Cuba. (Dermatology in the organization of public health in Cuba)*. Medicina Cutánea Ibero-Latino-Americana (Barcelona, Spain), 5(4), 1977, 251-260. Span.

This paper explains, with diagrams where appropriate, how dermatology is incorporated into Cuba's three-tiered health system and what sort of training in dermatology is available to specialist, medical, and allied personnel. It also briefly examines: the programmes for the control of venereal diseases, leprosy, and occupational dermatitis; research in dermatology; policy-making, standardization, and dissemination *vis-à-vis* dermatology; and the geographic distribution of dermatologists. (HC-L)

- 4946 Allodi, F., Duksza, J.** *Psychiatric services in China; or, Mao versus Freud*. Canadian Psychiatric Association Journal (Ottawa), 23(6), Oct 1978, 361-371. Engl. 12 refs.

Like other Chinese health services, mental health services are based on Chairman Mao's philosophical principles. Canadian visitors describe the Shanghai mental hospital and discuss the psychiatric services available in general hospitals, health centres, and health units in cities, factories, and communes in the People's Republic of China. In all centres, traditional and Western treatments are combined. Analysis of Shanghai hospital records reveal that 83% of admissions are young acute schizophrenic cases. Officially, mental illness is not considered a major problem and is given very low priority in medical school curricula and health services planning. (DP-E)

- 4947 Ann, W.L.** *Mass casualty organisation in burn disasters*. Medical Journal of Malaysia (Singapore), 31(4), Jun 1977, 349-352. Engl. 9 refs.

The overall management of large-scale burn disasters such as the 1961 circus fire in Niteroi, Brazil, revolves around 4 stages of operations: setting up first aid stations, sorting out patients according to the extent of their injuries and the urgency of treatment needed, transport to appropriate treatment centres, and treatment. Each stage is described in detail. The author points out that the handling and treatment of a large number of burn casualties is chiefly a problem of organization involving an assessment of existing facilities, prior preparation and planning, and sensible execution. Suggestions for overcoming administrative problems are given. (DP-E)

- 4948 Ashitey, G.A.** *Health problems in Japan and some useful lessons for developing countries*. Tropical Doctor (London), 10(2), Apr 1980, 74-77. Engl.

In 1945, the health profile and life expectancy in Japan were similar to those seen in many developing countries today. Now, however, Japan's vital and health statistics place it among the most developed countries in the world. This paper describes the health strategy—a comprehensive policy of community health that is based on proper planning and backed by law—that is responsible for this achievement. (HC-L)

- 4949 Behm, H.** *Demographic growth and health needs in Latin America*. International Journal of Health Services (Westport, Conn.), 9(1), 1979, 77-85. Engl.

Conference on Population and Development in Latin America, Mexico City, Mexico, 4-6 Aug 1977.

This paper describes the relationship between rapid demographic growth and the need for medical services in Latin America. The main contradiction lies between the magnitude of need for services generated by the adverse living conditions of the majority of the population, together with a restricted supply of health services, the availability of which varies according to social class. The problem of the increasing demand for medical care, generated by rapid population growth, must be recognized as originating in the socioeconomic structural conditions prevailing in Latin American countries today that determine low health levels, deficiencies in the provision of services, and population growth. (Modified journal abstract.)

- 4950 Brasil, Ministério da Saúde.** *Organização Pan-Americana da Saúde, Washington, D.C. Padrões mínimos de assistência de enfermagem em recuperação da saúde; informe final. (Minimum standards of nursing care for the recovery of health; final report)*. Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Organização de Serviços de Saúde, 1978. 66p. Portuguese. Grupo de Trabalho sobre Padrões Mínimos de Assistência de Enfermagem em Recuperação da Saúde, Brasília, Brazil, 3-14 Jul 1978.

This 1978 working group of nurses and administrators met to determine minimum standards for nursing care and means and strategies for implementing these standards in the nursing services of Brazil. Standards of care, conditions necessary for implementing them, and evaluation criteria are presented for the physical, therapeutic, psychosocial, and rehabilitation needs of patients and to ensure that the patient has a safe and comfortable environment. Strategies for implementing these standards on local, regional, and central levels are outlined. Annexes contain a glossary, sample evaluation forms, and documents from the working group. (RMB)

- 4951 Campos Tauil, M., de Azevedo, A.C.** *Community participation in health activities in an Amazon community of Brazil*. Bulletin of the Pan American Health Organization (Washington, D.C.), 12(2), 1978, 95-103. Engl. 14 refs.

Also published in Portuguese in *Boletín de la Oficina Sanitaria Panamericana*, 83(6), 1977.

Community participation in an 8-year comprehensive health programme in a rural town in Brazil is described. Various techniques were used to encourage community participation in projects such as vermin control, health surveys, a nutrition education and rehabilitation centre for children, a sex education programme, and cooperative housing improvement. On the basis of their experience with this project, the authors offer a number of recommendations for health programmes involving community participation. (DP-E)

- 4952 Chan, P.K., Harris, D., Rodenbeck, E., Roeder, R., Weiner, B.** University of Hawaii, School of Public Health, International Health Program, Honolulu. *Philosophy and strategy of public health in the People's Republic of China*. Honolulu, Hawaii, University of Hawaii, School of Public Health, International Health Program, Comparative Public Health Systems Series, Monograph No. 1, May 1974. 112p. Engl. 64 refs.

Papers in this collection on public health in the People's Republic of China cover the geographical and historical aspects, China's unique health movement, the political background of communism, the sociocultural basis of the health movement, life in a Chinese village, health care organization, medical manpower, medical education, population dynamics, nutrition, maternal and child health, parasitic and infectious diseases, occupational health and burn treatment, and mental health. The volume opens with Mao Tse-tung's poem "Farewell to the God of Plague" accompanied by an English commentary. (DP-E)

- 4953 Chanfreau, D.** *Professional ideology and the health care system in Chile*. International Journal of Health Services (Westport, Conn.), 9(1), 1979, 87-105. Engl. 41 refs.

This article illustrates the influence of doctors' ideology on the type of health services provided in Chile. A shift can be traced from a professional ideology emphasizing socialized medical services toward the current position favouring a return of fee-for-service medicine. A possible cause for these changes is the combined influence of the class position of physicians and the development of the profession itself. Increasing polarization of political forces in Chile has led doctors to act according to their class affiliation, regardless of their original professional position. Historical facts are provided at each stage of analysis to clarify the conflicting influences on doctors. (Modified journal abstract.)

- 4954 Chu, C.K., Sze, T.S.** *Patriotic public health campaign—a nation-wide mobilization for health*. Chinese Medical Journal (Peking), 4(4), Jul 1978, 253-256. Engl.

On April 7, 1978, the State Council of the People's Republic of China issued a notice on the launching of the Patriotic Public Health Campaign. Integrated with nationwide agricultural and industrial programmes and directed to all local authorities and government depart-

ments, this campaign emphasizes the need for the eradication of the four pests (rats, flies, mosquitoes, and bedbugs), environmental sanitation, health education programmes (personal hygiene, etc.), cooperation and participation of the population, and implementation of antiepidemic measures. A continuation of the campaign initiated by Chairman Mao, the Notice calls for further scientific research into pest control and communicable and endemic diseases. (AF)

- 4955 Community Change, Mill Valley, Cal.** *Evaluation, design and analysis of migrant health delivery systems; final report*. Mill Valley, Cal., Community Change, 15 Jul 1971. 237p. Engl.

Separate sections of this report on the evaluation, design, and analysis of migrant health delivery in the USA cover: planning methodology, field observations, and critique; trends in migratory labour (social characteristics, wages, location, etc.); a critique of project models, strategies, and settings (preventive programmes, intermittent care, etc.); the modeling of alternative health delivery systems (setting, design, financing, etc.); administration; and recommendations. Copious statistical data are included in the text and in appendices. (RMB)

- 4956 Cuba, Ministerio de Salud Pública.** *Revista cubana de administración de salud*. (Cuban health administration journal). Havana, Ministerio de Salud Pública, Centro Nacional de Información de Ciencias Médicas. Span.

A typical issue of this quarterly Cuban publication carries articles dealing with the philosophy of health administration, the interpretation of standards, the application of new concepts at the clinical level, curricular design and training methodology, and survey technique. The table of contents is printed in English as well as Spanish and each paper is followed by English, French, and Russian summaries. (HC-L)

- 4957 Développement et Santé, Paris.** *Quelle médecine pour le Tchad? (Which medical system for Chad?)*. Développement et Santé (Paris), 18, 1978, 15-17. Fren.

The author identifies three types of medical care—symptomatic, curative, and preventive—and indicates that a combination of all three is desirable, especially in a country such as Chad. He feels that Chad has relied too heavily on the 1st type, treating the symptoms and prescribing drugs without identifying the real causes of disease. Without abandoning symptomatic medicine entirely, priority must be given to preventive medicine, collective rather than individual care, and rural rather than urban services. The main objectives of the health services in Chad include vaccination, diagnosis, and treatment of intestinal parasitic diseases and childhood diseases. (FM)

- 4958 Dimond, E.G.** *Village health care in China*. In McNair, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadel-

phia, Pa., Society for Health and Human Values, 1978, 185-196. Engl.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

For complete document see entry 4937.

Village health services in the People's Republic of China are described. The system has as its basis a health care auxiliary whose title and location varies but who carries out similar functions; in the village this is the barefoot doctor, who is responsible for the health of 500-600 fellow commune workers. The commune is also served by a brigade midwife and visiting mobile health teams. A commune hospital serves 50 000 people and is supported, along with other health services, by common medical funds. Training programmes for barefoot doctors and physicians are discussed. (DP-E)

- 4959 Diop, S. Primary health priorities.** People (London), 6(1), 1979, 20. Engl.

The organization of Senegal's maternal child health and general health services is described. Eighteen primary centres and 40 secondary centres presently provide antenatal and postpartum care and health education; deliveries take place, whenever possible, in a maternity hospital. A project has been initiated to include family planning in the services offered by the centres. Preventive health services are provided, at village and rural district levels, by nurses in charge of health posts. These nurses form the backbone of national mass campaigns against yellow fever, smallpox, tuberculosis, and cholera. (DP-E)

- 4960 Esler, G.E., Kohn, R., Kaufman, C.K. World Health Organization/international collaborative study on medical care utilization; volume I: organization and development.** Springfield, Va., National Technical Information Service, 1970. 1v.(various pagings). Engl.

See also entry 5524.

This volume presents an account of the organization and implementation of this WHO study of medical utilization from 1967-1969. It outlines the study's major components and the approaches developed to ensure uniform data collection and analysis. It reflects study objectives, indicates types of organizational problems that may be encountered in similar studies, and shows how methods developed in an earlier feasibility study were applied to this larger study. Brief outlines of the study areas and their characteristics are provided. (Modified journal abstract.)

- 4961 Gish, O., Boostrom, E.R., Franks, J.A., Powell, R.N. American Public Health Association, Washington, D.C. Review of the health sector of Lesotho.** Washington, D.C., American Public Health Association, 1975. 66p. Engl.

This review of the health sector in Lesotho covers: the historical background of the health care delivery system; the organization of government health services; planning, administration, and managerial infrastructure; health resources; distribution of facilities and manpower; utilization of the health care system; preventive pro-

grammes; maternal child health; health manpower training; and finance. A separate section on planning examines the national development plans, external assistance, and food aid. Recommendations are made concerning the planning structure and administration, manpower, the rural infrastructure, hospitals, nutrition, etc. (DP-E)

- 4962 Institute of Development Studies, University of Sussex, Brighton, UK. Institute for Statistical, Social and Economic Research, University of Ghana, Legon. Ghana, Ministry of Health, National Health Planning Unit. University of Ghana, Department of Community Health, Korle Bu, Ghana. Health needs and health services in rural Ghana; volume 2: appendices.** Brighton, UK, Institute of Development Studies, University of Sussex, IDS Health Group, IDS Research Report, Aug 1978. 187p. Engl.

Unpublished document; see also entry 4963.

A total of 18 appendices present supplementary information, charts, and questionnaires designed to accompany a report on rural health care in Ghana. Topics covered include the organization of health services, observation schedules, evaluation of care, population coverage, polyclinic care, maternal child health services, communicable disease control, environmental sanitation, child nutrition, resource allocation, evaluation of health facilities and equipment, cost and training of health manpower, and community resources. Questionnaires designed to evaluate the type and quality of care given are reproduced, along with tables of statistical data on utilization rates, coverage, manpower, etc. (FM)

- 4963 Institute of Development Studies, University of Sussex, Brighton, UK. Institute for Statistical, Social and Economic Research, University of Ghana, Legon. Ghana, Ministry of Health, National Health Planning Unit. University of Ghana, Department of Community Health, Korle Bu, Ghana. Health needs and health services in rural Ghana; volume 1.** Brighton, UK, Institute of Development Studies, University of Sussex, IDS Health Group, Jun 1978. 274p. Engl. 28 refs.

Unpublished document; see also entry 4962.

This Ghana research project is part of a programme to develop health services appropriate to the needs of disadvantaged groups in developing countries, particularly in rural areas, and provide community organization for health activities and aid in the health sector. This report of the project sets the scene, describes the concepts and method, examines health needs and health services in the districts studied, assesses resources and organization, and studies the potential for alternative systems of primary care that emphasize community participation. Maps, statistical data, and a list of abbreviations are included. (RMB)

- 4964 Katsunuma, H., Maruchi, N., Togo, M. ed(s). Health aspects of community development in Southeast Asia; community health/medicine.**

Tokyo, Southeast Asian Medical Information Center, 1977. 283p. Engl. Refs.

Fourth SEAMIC Seminar, Tokyo, Japan, 27 Sep-9 Oct 1976:

Following the list of participants, opening addresses, and report of a special meeting on field surveys in Japan, the conference papers are presented in five sections, each one containing country reports from Indonesia, the Philippines, Singapore, Thailand, and Japan. Topic 1 describes the health services and medical care system of each country. Topic 2 examines family health with emphasis on family planning policies. Topic 3 on nutrition and health covers nutritional status and policy. Topic 4 studies pollution control in relation to industrialization. The final topic deals with health education and community organization. Special general lectures, a summary of each topic, and references complete the chapters. (FM)

- 4965 Khader, N. Rural health care.** Journal of the Indian Medical Association (Calcutta, India), 70(10), 16 May 1978, 236-239. Engl. 16 refs.

After describing the major obstacles to the success of health schemes in India, the author outlines the objectives of a model rural health programme. These include: comprehensive, continuous care; cooperative efforts; a community-based approach; equality of services; easy accessibility and availability; and the strengthening of the rural infrastructure. Primary health centres should be reorganized to serve a population of 25 000-30 000. Existing centres at the block level could then be converted into fully-equipped hospitals surrounded by a network of peripheral community health centres. (FM)

- 4966 Leung, S.M., Miller, M.H., Leung, S.W. Chinese approach to mental health service.** Canadian Psychiatric Association Journal (Ottawa), 23(6), Oct 1978, 354-360. Engl. 13 refs.
Annual Meeting of the American Psychiatric Association, Toronto, Canada, May 1977.

The Chinese maintain that the key to all health and mental health advances is a combination of social and economic reforms, grass roots programmes, and a self-reliance strategy with an intense personal motivation to change one's way of life. During six visits to the People's Republic of China, the authors observed and reported on the treatment and continuing care of psychiatric patients. Treatment included both traditional and Western medicines, acupuncture, and occupational and group therapy. After an average hospitalization of 80-90 days, the patient receives follow-up care from the barefoot doctors at the local health clinic. The authors feel that, except for the self-care aspect, the Chinese system might not be adaptable to other political and social conditions. (DP-E)

- 4967 Lim, C. Health care for Singapore's school children.** Nursing Journal of Singapore (Singapore), 19(1), Jul 1979, 3-6. Engl.

Through the School Health Services, all schoolchildren in Singapore receive systematic developmental assessments carried out by the school health doctors and nurse

practitioners at selected intervals. Physical, intellectual, mental, and emotional health and social development are assessed and slow learners, the malnourished, epileptics, etc., are identified, treated, and followed up. A vaccination programme against infectious diseases (smallpox, diphtheria, etc.) is carried out and school dental health, outpatient, and hospital services cater to the health needs of children. These facilities, along with good housing, safe water, and small families, will result in the improved health and economic status of a new generation. (AF)

- 4968 Lubout, J., Smythe, J., Craft, K., Moore, J., Leslie, A. Health and medical care in China.** Australasian Nurses Journal (Port Adelaide, Australia), 8(1), Jul 1978, 50-53. Engl.

The history of health services in the People's Republic of China is traced to 1949, when Chairman Mao established a new system based on his four well-known principles. The organization of present medical and health services is outlined and the role and education of various health workers, namely physicians, barefoot doctors, nurses, midwives, and neighbourhood health workers, are discussed. The use of traditional Chinese medicine is also examined. The Chinese system is praised as a successful community-oriented and community-supported model of health services that is being studied all over the world. (DP-E)

- 4969 Martin-Buss, Y. Health services in Rhodesia.** New Zealand Nursing Journal (Levin, New Zealand), 71(7), Jul 1978, 16-17. Engl.

The organization of health services in Rhodesia is described by a Rhodesian nurse trained in New Zealand. The ratio of hospital beds in Rhodesia is 1:350 inhabitants and health care is free for African, but not European, patients, with separate facilities for each. Nurses' and midwifery training courses are outlined. The author was particularly struck by Braille teaching in rehabilitation centres and the treatment by prosthesis and physiotherapy of terrorist victims. (DP-E)

- 4970 Muller, A.S., Ouma, J.H., Mburu, F.M., Blok, P.G., Kleevens, J.W. Machakos Project studies: agents affecting health of mother and child in a rural area of Kenya; I: introduction: study design and methodology.** Tropical and Geographical Medicine (Haarlem, Netherlands), 29(3), Sep 1977, 291-302. Engl.

See also entries 5497, 5536, 5545, and 5592.

In 1972, a longitudinal, population-based project was initiated in Machakos, Kenya, to: obtain accurate morbidity and mortality data concerning nutrition, infectious diseases, and related socioeconomic factors; obtain accurate data on maternal and prenatal morbidity and mortality; and develop a system of registration of births, deaths, and cause of death suitable for use in a rural area of Kenya. Two separate areas, each with a population of approximately 24 000, were studied. The study methodology is described and related calculations are presented as statistical data. (Modified journal abstract.)

- 4971 Naraghi, M.M., Alemi, A.A.** *Appraisal of mental health and services in Iran.* Israel Annals of Psychiatry and Related Disciplines (Jerusalem), 16(1), Mar 1978, 21-27. Engl. 8 refs.

The authors examine the extent of mental illness in Iran and evaluate the development of mental health services. Admission statistics for the Roozbeh Hospital in Teheran showed an increase over the last 3 decades proportionate to the number of beds available for psychiatric care. A field survey carried out on 509 persons in 1971 revealed that 41.4% suffered from some form of psychiatric disorder. The authors recommend complete coverage of mental illness by health insurance programmes with emphasis on rehabilitation within the community rather than in hospitals. Preventive services for different age groups are discussed, including prenatal care, school health, and care of the elderly. (FM)

- 4972 Nicolausson, U.** *Place of primary health care centers in the health delivery system in Sweden and the education of the health care team.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 217-237. Engl. 8 refs.

For complete document see entry 4937.

The author gives an extensive description of the primary health care system in Sweden, its development (district medical officers, nurses, dental centres), drawbacks (highly specialized expansion, etc.), changes (social, economic, financial, living standards, family role, education, longevity, etc.), and reconstruction (National Board of Health and Welfare efforts to pass new legislation governing district health care, etc.). Future aims for the primary health care services include integrating preventive and therapeutic efforts with social services, making professional services easily accessible to the community, ensuring the welfare of all citizens, cooperating with the social services, etc. (AF)

- 4973 Osuhor, P.C.** *Organisation of health services in Nigeria.* Health and Population (New Delhi), 1(1), Jan-Mar 1978, 1-11. Engl.

The history of health services in Nigeria is traced and the present organization and administration of the system are examined. The Basic Health Services Programme in the Third National Development Plan (1975-1980) aims to provide total coverage of the population with comprehensive and curative services by means of appropriate technology and reorganization and redistribution of existing services. The most widely distributed health service will be the health clinic (replacing the dispensary), backed up by mobile health units, health centres, and comprehensive health centres (hospitals) organized in basic health units serving 50 000 people. The services to be provided by each facility are set forth. (DP-E)

- 4974 Paine, L.H. ed(s).** *Health care in big cities.* London, Croom Helm, 1978. 368p. Engl.

Contributions from medical experts around the world

are organized into two main sections of 11 and 10 chapters. Part 1 examines health services in 11 cities: London, New York, Paris, Sydney, Toronto, Bogotá, Mexico City, São Paulo, Hong Kong, Manila, and Tokyo. Organization, administration, and planning are studied and the major problems of urban health care are outlined. Part 2 covers specific aspects such as community participation in mental health services, health economics, regionalization, methods of evaluating medical care, health services for immigrants, policy and planning issues, hospital construction, auxiliary medical services, the *barangay*-health centre system in the Philippines, and emergency medical services in Tokyo. (FM)

- 4975 Pan American Health Organization, Washington, D.C.** *Maternal and child health strategy for the Caribbean community.* Washington, D.C., Pan American Health Organization, Scientific Publication No. 325, 1976. 42p. Engl.

This document presents the recommendations of two PAHO Technical Advisory Groups regarding the responsibilities of the health services *vis-à-vis* the mother, the infant and preschooler, the schoolchild, and the adolescent; the components and requirements of MCH infrastructure; and some needs peculiar to the region-e.g., nutrition education, sex education, paternal responsibility, and a review of health, family, and abortion legislation. Coverage goals are included in the recommendations, where applicable. (HC-L)

- 4976 People, London.** *Promise of Alma Ata.* People (London), 6(1), 1979, 32-33. Engl.

Some of the obstacles to implementing the proposals of the Alma-Ata conference in different countries are discussed. For example, Jamaica, whose health care system is credited with raising the life expectancy of its people to US levels, spends only 5% of its budget on primary care and health officials feel committed to maintaining the present hospital-based system. On the other hand, Botswana lacks both the material and the administrative infrastructure to implement a national health system and Liberia cannot even afford the US\$50 *per capita* expenditure of the Russian feldsher system. Other problems include the strings attached to foreign aid, which finances many health care systems, the multinational drug companies, and the interpretation of primary care. (DP-E)

- 4977 Philpott, R.H.** *What the community needs-obstetric care.* South African Medical Journal (Capetown), 53(21), 27 May 1978, 831-833. Engl.

Obstetric services should be an integral part of a maternal child health service that includes family planning and child welfare facilities. The best measure of the efficiency of such a service is perinatal mortality, which is still high in South Africa. An outline of a basic obstetric service is presented; it includes hospitals and a clinic within 5 km of every woman in the catchment area. The functions of the base hospital are discussed and the problem of quality control is examined. (DP-E)

- 4978 Roux, J.P.** *Social revolution in health services.* South African Medical Journal (Capetown), 52(17), 15 Oct 1977, 686-688. Engl.

This article stresses the importance of community participation in the social rehabilitation of individuals recovering from mental or organic diseases and emphasizes the role of primary care in helping to relieve the pressure on conventional South African health services by caring for more people at the community level. Health professionals should be trained to have the medical skills and the flexibility of mind to deal with all the community's problems. Health technology should be developed and applied in harmony with the social functions of health services. (Modified journal abstract.)

- 4979 Samadi, A.R.** WHO, Brazzaville. *Development of health services in Malawi: maternal and child health.* Brazzaville, WHO, 11 Apr 1975. 19p. Engl.

The maternal and child health (MCH)-related objectives of this project were primarily as follows: the establishment of MCH services at existing and future rural health units, ensuring total coverage of the entire population of Malawi; the establishment of a demonstration zone for the training of all categories of health personnel, with emphasis on MCH and environmental health; and the intensification of present efforts in the fields of health and nutrition education, environmental sanitation, and communicable disease control. This paper describes the project's history, efforts, accomplishments, and recommendations. (HC-L)

- 4980 Sicault, G.** *Voies nouvelles de la santé dans le Tiers-Monde. (Health innovations in the Third World).* Assignment Children (Geneva), 33, Jan-Mar 1946, 17-31. Fren.

Innovations in health care in several developing countries promise some relief from the problems facing the Third World. Activities in the People's Republic of China, Cuba, India, Niger, Nigeria, Tanzania, Venezuela, and Yugoslavia are briefly described. All share certain characteristics, such as official commitment to total health care, public participation, integration of health services with other aspects of social and economic development, redistribution of resources to benefit rural areas, increased utilization of auxiliary health workers, collective financing, and proper supervision. Though these programmes vary in detail, they all serve as examples of what can be done where changes in social and economic structures have mobilized health resources. (FM)

- 4981 Solon, F.S.** *Nutrition organization and programming at all levels of administration in the Philippines.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 71-89. Engl. Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

The history of nutrition services in the Philippines is

traced from 1928 to the present. In 1974, the National Nutrition Council was established as the coordinating centre for nutrition committees at the regional, urban, municipal, and *barangay* or local levels. Case studies are provided of: the Bauan nutrition programme, which concentrated on nutrition education and training, supplementary feeding, food production, and family planning; the nutrition activities of region III; the Bulacan nutrition programme, which was centered around food assistance and nutrition and health education; and Project Compassion, which integrated the nutrition, food production, family planning, and environmental management programmes of the private sector. (DP-E)

- 4982 Tang, R.C.** *Community efforts in the delivery of health services in Hong Kong.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 167-184. Engl. 10 refs.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

For complete document see entry 4937.

Three models of community health services organization are examined. As an example of one type of programme, the Kwun Tong Community Health Project (Hong Kong), initiated in 1973 to serve some 600 000 people, is described. Problems common to community health programmes are discussed; these include urbanization and the associated problems of migration, community representation, the relationship between the degree of citizen participation and the quality of the programme, cultural aspects, and means of evaluation. Appendices cover civic organizations in Hong Kong, the community development advisory committee, and the health education advisory committee. (DP-E)

- 4983 Taylor, C.E.** *Technical and administrative support for an operable PHC programme.* Assignment Children (Geneva), 42, Apr-Jun 1978, 114-127. Engl.

The greatest problem in stimulating and maintaining momentum in primary care programmes is effective management. The most pressing research need is to find better ways of organizing basic health services and mobilizing community participation. The components of supportive supervision-provision of logistics and supplies at the right time and place, design of facilities, mechanisms for referral and follow-up, monitoring to prevent discrimination, equitable financing, and ongoing evaluation and research-all require a balance of responsibility between the health system and the community. One of the most exciting aspects of primary care is the promotion of community involvement in what were formerly considered areas of technical specialization. (Modified journal abstract.)

- 4984 Velimirovic, B.** *Forgotten people-health of the migrants.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(1), 1979, 66-85. Engl. 61 refs.

The author examines migration patterns on national and international levels and discusses some of the legal aspects of migration, including the problems of illegal aliens, in particular Mexican workers who migrate to the USA. Health problems of migrants include importation of diseases, exposure to unfamiliar diseases, adaptation stress, occupational risks and accidents, poor living conditions, and lack of access to medical services, which exacerbates all the other problems. The integration of migrant health programmes into community health services is the only durable solution, although it may cause initial overtaxing of existing services. On the other hand, it could also provide a stimulus to health services to expand the range of care, adapt technologies and manpower development, and restructure health care systems on the basis of functional level of care. (DP-E)

- 4985 Villegas, H.** *Costa Rica: recursos humanos y participación de la comunidad en los servicios de salud en el medio rural. (Costa Rica: human resources and community participation in the rural health services).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 84(1), Jan 1978, 13-23. Span.

The Rural Community Health Programme is the means by which Costa Rica proposes to attain 100% coverage of the rural population by the end of this decade. This paper describes: the programme's objectives, organization, and activities; the selection, training, functions, and supervision of its primary care and voluntary personnel (nursing auxiliaries, rural health assistants, volunteer workers, and health promoters); and the role of the community in its orientation and operation. (HC-L)

- 4986 WHO, Brazzaville.** *Health for the people by the people.* Brazzaville, WHO, AFRO Technical Papers No. 14, 1978. 147p. Engl.

The 1st section of this WHO technical paper contains reports on: health and social services in Guinea-Bissau, Madagascar, and Niger; disease control in the Congo; mental health in Ghana; family and maternal child health in Nigeria, Kenya, and Rwanda; human resources and development in Tanzania and Ghana; financial development in Madagascar; and science and appropriate technology in Rwanda, Cameroon, and Nigeria. The 2nd part covers three decades of health action and prospects in environmental health, communicable disease control, noncommunicable diseases, food and nutrition, family health, comprehensive health services, health progress and manpower development, and research and development. (RMB)

- 4987 WHO, Geneva.** *Guiding principles and recommendations on labelling of clinical laboratory materials: a WHO memorandum.* Bulletin of the World Health Organization (Geneva), 56(6), 1978, 881-885. Engl.

Also published in French and Spanish.

This memorandum gives specifications for the recommended minimum information to be given on the labels attached to the immediate containers of clinical laboratory materials, kits and kit components, reference mate-

rials including calibrators and control materials, and, when applicable, general laboratory materials. A package insert or brochure is generally required for clinical laboratory materials, kits, and reference materials and specifications are also given for determining this information. Definitions of terms used in the memorandum are included in an annex. (DP-E)

- 4988 WHO, Manila.** *Report of the fifth South-west Pacific inter-territorial meeting on malaria.* Manila, WHO, 10 Apr 1972. 37p. Engl.

Fifth Southwest Pacific Interterritorial Meeting on Malaria, Sydney, Australia, 11-15 Oct 1971. Country reports from Australia, the British Solomon Islands Protectorate, Indonesia, the New Hebrides, and Papua New Guinea outline antimalaria activities in these South Pacific nations. A survey project in the New Hebrides to determine the feasibility of malaria eradication is described and the administrative, operational, and epidemiological aspects of antimalaria programmes are discussed. Chapters 6 and 7 examine the integration of malaria control with general health services in Australia and the problems of maintaining achieved eradication. Chapter 8 covers human resources and training, while chapter 9 outlines the economic aspects. The final chapter indicates research requirements and the report concludes with recommendations concerning administration, operations, training, research, and maintenance activities. (FM)

II.3 Planning

See also: 4936, 4975, 5100, 5152, 5168, 5182, 5340, 5346, 5356, 5396, 5517, 5542.

- 4989 Acheson, R.M., Hall, D.J., Aird, L. ed(s).** London School of Hygiene and Tropical Medicine, Centre for Extension Training in Community Medicine, London. *Seminars in community medicine; volume 2: health information, planning, and monitoring.* London, Oxford University Press, 1976. 189p. Engl.

Seminar on the Future of Government Health Statistics, London, UK, Apr 1974.

Seminar papers have been organized into book form reflecting the major areas of health information that affect planning and management. Chapter 1 compares the national statistical systems of the USA and the UK. Chapter 2 discusses indicators of health needs, demand, and use. Information requirements for effective central planning are outlined in chapter 3, which covers operational research, budgeting, and manpower planning. Chapter 4 analyzes local planning, including clinical records maintenance and information systems for doctors and hospitals. Chapter 5 studies the use of statistics to monitor the quality of care and its economic efficiency. Concluding chapters review the role of information in health planning. (FM)

- 4990 Ahmed, M.** *Community participation, the heart of primary health care.* Assignment Children (Geneva), 42, Apr-Jun 1978, 80-99. Engl.

On the basis of the experience accumulated to date, the author describes the essential features of the community participation component within successful primary care programmes, the obstacles to be overcome, and the basic elements of a strategy to initiate and enhance the people's participation. These elements include the reorientation of the health service structure and personnel, diagnosis of the situation in individual communities, devising and improving modes and mechanisms of participation, use of the educational process, cooperating with voluntary organizations, experimentation and phasing of development to the community, and international action in support of primary care. (DP-E)

- 4991 Assignment Children, Geneva Governments and the people's health.** Assignment Children (Geneva), 42, Apr-Jun 1978, 6-148. Engl.

Also published in French.

Articles in this special issue on governments and the people's health examine various aspects of government health planning and policy-making, including intersectoral policies for better health, primary health care planning strategies, the reorientation of health personnel to meet the people's needs, community participation, administration, costing, and technical and international support. A primary health care programme in Afghanistan that trains and deploys village health workers and traditional midwives is presented as an example of a viable, government-sponsored programme and summaries are given of other primary care case studies in previous issues. (DP-E)

- 4992 Bekele, M. Intersectoral policies for better health.** Assignment Children (Geneva), 42, Apr-Jun 1978, 27-43. Engl.

This paper examines some of the determinants of health, the contributions that a primary health care strategy can make, and the intersectoral policies that are necessary to improve health status. Primary health care can contribute to development by enabling populations to contribute to their own development, assisting demographic transition, and providing an entry point for other development programmes. The author also outlines and discusses other corrective and promotive policies needed in non-health sectors such as food and agriculture, water supply, sanitation and environmental health, public works and communications, education, industry, and finance. (DP-E)

- 4993 Bekele, M. Administration, costing, and international support.** Assignment Children (Geneva), 42, Apr-Jun 1978, 100-113. Engl.

The implementation of a primary care programme can be facilitated by its integration into the overall national development effort. Planning at the national level should ensure an equitable redistribution of resources while decentralizing tasks to the regional and local levels, where health-related activities can be coordinated in keeping with the priorities established by the local communities. However, even with a national commitment to primary care, Third World countries still need the aid of developed countries to provide direct assistance to the

health sector for primary care policies, increase capital flows to programmes for the poorest, and institute a new international framework that will promote accelerated development. (Modified journal abstract.)

- 4994 Bouhairie, T., Nader, P.R. Approach to school health in a developing country.** Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(4), Aug 1977, 189-196. Engl. 27 refs.

School attendance affords a unique opportunity for monitoring the growth and development of children and exposing them to preventive measures and health education. This paper reviews the common problems of school-aged children in a developing (African) country, outlines the components of a school health programme and the obstacles likely to be encountered in its delivery, and makes a number of short- and long-term recommendations regarding its implementation. (HC-L)

- 4995 Burgess, L. Nutrition surveillance at village level.** In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 134-138. Engl. Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

The three major functions of nutritional surveillance are: monitoring, or the taking of routine measurements; trend assessment, which is used for the creation, evaluation, and adaptation of food and nutrition policies and programmes; and prediction of changes in nutritional status. The author examines the genesis of malnutrition and its relationship to measurement indicators, characteristics of indicators, selection of indicators, types of indicators (meteorological, agricultural, economic, and medical), and recording. (DP-E)

- 4996 Conference of Missionary Societies in Great Britain and Ireland, London. Model health centre; a report of the Working Party appointed in 1972 by the Medical Committee of the Conference of Missionary Societies in Great Britain and Ireland.** London, Conference of Missionary Societies in Great Britain and Ireland, Medical Committee, 1975. 1v.(various pagings). Engl.

As a result of the 1971 International Hospital Federation conference, several architects collaborated to produce this detailed health centre model to help standardize buildings and methods for providing health care in developing countries. Their report shows how, with careful forethought in the siting of the 1st buildings and allocation of the land, a small clinic can be developed into such a health centre, with the capacity to serve up to 20 000 people within a radius of 10-20 miles. Appendices describe how the health centre could later be developed into a district hospital and cover such aspects as staff training and duties, equipment, construction, provision of essential services, etc. (RMB)

- 4997 Contado, T.E.** *UPLB nutrition improvement model for a Philippine barangay.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 168-182. Engl.

Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

The design of the University of the Philippines at Los Baños nutrition improvement model is analyzed. The model is intended to maximize the development of the nutritional improvement potential of the *barangay* level and contribute to municipal, regional, and national development planning and to rural and nutrition development education. Major aspects of the model are its focus on increasing the available food supply by the introduction and elaboration of appropriate technology, the use of extension and non-formal education, the integration of local organizations and personnel, and external material input as investment. (DP-E)

- 4998 Donoso, G.** *Public health nutrition in rural areas.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 123-133. Engl. 21 refs.

Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

The author discusses certain strategies that can be used in attempting to solve the problem of malnutrition, especially among children, in Southeast Asia. These include: the involvement of the community itself and use of its resources, particularly manpower, such as traditional practitioners and midwives; the definition of a minimal programme of health activities, aiming at a maximal protection, using available resources and appropriate health technology; emphasis on education; priority for the mother and child; and the gradual build-up of effective links with health centres at other levels for referral, technical supervision, logistic support, and training. WHO's list of principles for primary health care is examined. Statistical data are included. (DP-E)

- 4999 Feachem, R., Burns, E., Cairncross, S., Cronin, A., Cross, P.** *Water, health and development; an interdisciplinary evaluation.* London, Tri-Med Books, 1978. 267p. Engl. Refs.

The findings of an 18-month study of Lesotho's rural water programme are presented in part 1 of this evaluation. In part 2, these findings and other studies from around the world are used as the basis for a general discussion of all aspects of the planning and design of rural water programmes in developing countries. Part 2 contains chapters on planning village water supply programmes, goals and benefits, village level management, technical decisions, and appropriate management. Copious statistical data are included. (RMB)

- 5000 Gish, O.** *PHC planning strategy.* Assignment Children (Geneva), 42, Apr-Jun 1978, 46-66. Engl.

The prevalent characteristic of health and disease within most of the Third World is the high level of infant and child mortality. Health policy and planning must take as their point of departure these stark realities, explicitly recognizing as their highest priority the provision of basic health care to everyone, especially women and children. The data required and the planning process to be followed to achieve this goal are examined in detail. The various levels of services and personnel must be planned in relation to national disease patterns, economic realities, and an effective primary care strategy, with the smallest health unit and the community health worker as the centre of attention. (Modified journal abstract.)

- 5001 Hogh, B., Petersen, E.** *Planaegning af rural health projects i udviklingslande med et eksempel fra Ngamiland, Botswana. (Planning of rural health projects in developing countries with an example from Ngamiland, Botswana).* Ugeskrift for Laeger (Copenhagen, Denmark), 140(40), 10 Oct 1978, 2469-2473. Danish. 17 refs.

Before a health aid project can be instituted, the health policy of the country concerned must be assessed. Since approximately 80% of developing country populations live in depressed rural areas, government policy should give the highest priority to the development of rural health services. Emphasis should be placed on staff with limited training and an effective referral system. Project relief should not be offered to countries that give priority to training doctors and building hospitals. An example is given of a project in Ngamiland (Botswana) that aims to establish health posts and train family welfare educators. (Modified journal abstract.)

- 5002 Imperial Organization for Social Services, Commission on the Study of Health and Medical Problems, Teheran.** *Report of the Commission on the Study of Health and Medical Problems; a summary. 2 edition.* Teheran, Imperial Organization for Social Services, Apr 1975. 117p. Engl.

Originally published in Persian.

This document is a summary of an extensive April 1974 report prepared by the Commission on the health status of Iran. Among other suggestions, the Commission recommends the establishment of a national integrated health delivery network based on new types of health workers, mainly auxiliaries. This in turn will lead to changes in medical, particularly physician, education. Other recommendations deal with organizational reforms, investment in health systems, maternal child health, traditional medicine, research and translation priorities, the training and deployment of front-line health workers, and the revision of existing laws concerning medical practice. (RMB)

- 5003 Jeffrey, M.J., Reeve, R.E.** *Community mental health services in rural areas; some practical issues.* Community Mental Health Journal (New York), 14(1), Spring 1978, 54-62. Engl. 11 refs.

Several critical issues involved in successfully initiating and maintaining a community mental health centre programme in a rural setting (examples are from the USA) are discussed. These include: the need to assess the existing social, cultural, and political systems and adapt the programme to them as closely as possible; the special problems faced in maintaining confidentiality; and the importance of recognizing and dealing with pressures on professional staff that are peculiar to a rural setting. Advantages and disadvantages of working in a rural setting are considered. (Modified journal abstract.)

- 5004 Joseph, S.C., Scheyer, S.C.** *Strategy for health as a component of the Sahel development program.* Washington, D.C., Agency for International Development, 1977. 137p. Engl.

Also published in French.

A proposal for the Sahel that outlines a strategy for improving the health status of the population within the context of a general development framework is presented. Four major themes are emphasized: the importance of coordinating health services with other development activities, the importance of access to world-wide health services, the limits of current and future resources, and the need for services in peripheral villages. The principal health strategies discussed are resource allocation, village-based health systems, demographic and health planning, the components of an integrated village-based system, and health implications of planning in other sectors. Aspects of investment in health as a factor in socioeconomic development are also explored. Statistical data are included. (RMB)

- 5005 Khader, N.** *Rural health care.* Journal of the Indian Medical Association (Calcutta, India), 70(10), 16 May 1978, 236-239. Engl.

The author discusses the basic difficulties that India faces with regard to providing rural health care, including poverty-related problems, inappropriate medical education, inadequate financing, and poor planning. The chief objectives of a rural health programme should be comprehensive and continuous care, cooperative efforts, a community-based approach, equality of service, easy accessibility and availability, and strengthening of the rural infrastructure. In addition, these factors must be considered: provision of the basic amenities of life to the rural population, training of medical and paramedical personnel, and financing. (DP-E)

- 5006 King, M.H., King, F.M., Martodipoero, S.** *Health microplanning: a systems approach to appropriate technology.* In Technologies for Rural Health, London, Royal Society, 1977, 61-68. Engl.

Royal Society Discussion of Technologies for Rural Health, London, UK, 9-10 Dec 1976.

For complete document see entry 5225.

A method of detailed technological planning is described in which a subsystem of the total health care delivery system is identified and the components within it are created and integrated with one another. The components produced are called a microplan, since they concern

planning for technical detail. A project for microplanning maternal child health services in Indonesia is discussed and some of the promising features of the new method are described. (Modified journal abstract.)

- 5007 Molina-Guzmán, G.** *Third World experiences in health planning.* International Journal of Health Services (Westport, Conn.), 9(1), 1979, 139-150. Engl. 42 refs.

Public health problems are essentially social in character and can only be solved in terms of social policy. The author points out the current mistake of placing the emphasis on individual behaviour, divorced from its social base, in the work of health professionals in developing countries. The value and limitations of indicators are discussed and the weakness of national average values and the consequent need to measure the differentials between social groups are illustrated. Positive and negative lessons learned by experimenting with health technology consistent with the expected development of countries are examined as a basis for a genuinely emancipatory approach to the health problems of the Third World. (Modified journal abstract.)

- 5008 Monge, C.** *Ecology and health.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(1), 1978, 7-10. Engl.

Sixteenth Meeting of the Pan American Health Organization Advisory Committee on Medical Research, Washington, D.C., 11-15 Jul 1977.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 84(1), 1978.

The author discusses the ecological concept of health, in which health is not defined as a universal standard but is determined by the ecological conditions of a particular environment. A model is presented for use in the Andean region, where both high altitudes and mining conditions influence the health of miners. A study is proposed to assess the effects of these conditions and define standards of living and corrective medical activities needed to maintain optimal health in this population. The roles of the Pan American Centre for Human Ecology and Health and the Pan American Centre for Sanitary Engineering and Environmental Sciences in this research are examined. (DP-E)

- 5009 Moreau, J.P., Prost, A., Prod'hon, J.** *Essai de normalisation de la méthodologie des enquêtes clinico-parasitologiques sur l'onchocercose en Afrique de l'ouest. (Attempt to standardize the methodology of clinico-parasitological surveys of onchocerciasis in West Africa).* Médecine Tropicale (Marseille, France), 38(1), Jan-Feb 1978, 43-51. Fren. 23 refs.

In order to facilitate the comparison of West African onchocerciasis surveys, the authors attempt to standardize the methodology of these surveys by defining the following points: criteria for choosing villages, selection of population specimens, registration of socio-demographic data, clinical examination, assessment of visual acuity, definition of epidemiologic indices, adjustment of these indices to a standard population, etc.

Appendices include a survey form, a table for assessing children's ages, and a standardization scale. (DP-E)

- 5010 Nainggolan, S.C.** *Effective strategy of total health care supply for developing nations.* Jakarta, Christian University Medical School, Dec 1977. 99p. Engl. Refs.

This document describes the theoretical basis and implementation strategy of an approach to health care delivery that is based on the transformation of homes and communities into centres of 'total health,' i.e., physical, mental, environmental, economic, and demographic well-being. Actions to be undertaken at the national, district, and local levels are indicated and formulae for diagnosing the health situation in homes and communities are appended. (HC-L)

- 5011 Parker, B.R., Srinivasan, V.** *Consumer preference approach to the planning of rural primary health-care facilities.* Operations Research (Tokyo), 24(5), Sep-Oct 1976, 991-1025. Engl. 58 refs.

This proposed approach to planning rural health services involves these five steps: identification of preferred facility attributes such as accessibility, personal manner, quality and price of care; modeling of an individual's overall preference for alternate facilities; calculation of the worth in dollars/year of any existing and potential facility to any individual; calculation of the total benefit of the proposed system to the community; and development of a system that maximizes the benefit to the community given the cost restraint. A practical application of the approach reveals that the consumer preference method has substantial validity and reliability. (Modified journal abstract.)

- 5012 Pickford, J. ed(s).** *Environmental health engineering in hot climates and developing countries.* Loughborough, UK, Loughborough University of Technology, Department of Civil Engineering, Sep 1973. 107p. Engl. Refs.

Conference on Environmental Health Engineering in Hot Climates and Developing Countries, Loughborough University of Technology, Department of Civil Engineering, Loughborough, UK, Sep 1973.

Unpublished document.

The proceedings of this conference include the list of participants and summaries of the discussions. The 1st paper examines the needs and problems of water supply in developing countries. It covers such topics as financing, technology transfer, government planning, and personnel training. A 2nd paper discusses the relationship between buildings and their environment, based on settlement schemes in the Sudan, and describes construction techniques, building materials, and designs for houses and villages. Techniques of waste water and refuse treatment in India provide the 3rd topic. The final paper studies the organization of overseas engineering projects in the field of environmental health. (FM)

- 5013 Ranuwihardjo, S., Hadisapoetro, S.** *Some notes on nutrition improvement model; an Indonesian case.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 185-187. Engl. Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

The authors identify target groups for Indonesian nutrition programmes; these include: children aged less than 1 year, of whom 24% suffered from protein-calorie malnutrition; pregnant women, whose average weight gain per pregnancy is only 6 kg; and lactating women. There is a need to collect appropriate baseline data and establish a university pilot project in villages with different economic levels. (DP-E)

- 5014 Regional Organization for Inter Governmental Cooperation and Coordination in Population and Family Planning in South East Asia, Kuala Lumpur.** *Integrated approach at grassroots level towards family planning and health programme with particular emphasis on nutrition and parasite control.* Kuala Lumpur, Regional Organization for Inter Governmental Cooperation and Coordination in Population and Family Planning in South East Asia, Secretariat, 1977. 127p. Engl. Workshop in an Integrated Approach at Grassroots Level towards Family Planning and Health Programme with Particular Emphasis on Nutrition and Parasite Control, Genting Highlands and Kuala Lumpur, Malaysia, 23-25 Mar 1977.

This workshop brought together key persons in the family planning and health sectors of Indonesia, Malaysia, Nepal, the Philippines, Singapore, and Thailand in order to exchange information on their respective family planning and health programmes, to study the feasibility of integrating family planning with nutrition and parasite control programmes and the potential of such an approach in generating community participation, and to prepare guidelines for implementing such an integrated programme. This report contains a summary of the workshop proceedings and reproduces the background papers that were used as reference documents throughout the discussions. (HC-L)

- 5015 Shah, M., Shrestha, M.P., Campbell, M. ed(s).** *International Development Research Centre, Ottawa. Rural health needs; report of a seminar held at Pokhara, Nepal, 6-12 October 1977.* Ottawa, International Development Research Centre, 1978. 64p. Engl. 20 refs.

Seminar on Rural Health Needs, Pokhara, Nepal, 6-12 Oct 1977.

The Nepal Health Manpower Development Research Project aims to develop a methodology for identifying health needs as perceived by the community and conducting an inventory of available health resources. The 1st part of this report describes, complete with sample forms and questionnaires, the application of the methodology in Tanahu District, Nepal. The 2nd part contains

summaries of the experiences of Afghanistan, the Philippines, Sri Lanka, and Thailand in rural health delivery plus three papers of a more general nature. A short annotated bibliography on health services research, operations research, and methods of data collection and analysis is included. (HC-L)

- 5016 Sharif, N., Abdulbhan, P. ed(s).** *Systems models for decision making*. Bangkok, Asian Institute of Technology, May 1978. 433p. Engl. Refs. International Conference on Systems Modelling in Developing Countries, Bangkok, Thailand, May 1978.

Following a general introduction to systems modelling, chapter 2 surveys general systems research and its usefulness to all professionals. Chapter 3 describes systems dynamics and chapter 4 reviews the use of activity networks in planning and control. The role of infrastructures in the development process is examined in chapter 5, followed by a chapter on the application of systems modelling in the military. Past trends in its application to health services are studied in chapter 7, while chapter 8 analyzes its use in appropriate technology. Chapter 9 examines forecasting for technological management and the final chapter reviews the development of multicriterion optimization models. (FM)

- 5017 Smith, R.A. ed(s).** *Manpower and primary health care; guidelines for improving/expanding health service coverage in developing countries*. Honolulu, University Press of Hawaii, 1978. 189p. Engl. Refs.

This book describes an approach to organizing improved and expanded primary health care systems. The chapters contain what the authors have found to be a useful way of grouping the problems confronted by health planners and they are also guidelines reflecting practical experience and intended to encourage decision-makers to find and develop their own country-specific methods of solving their own country-specific problems. Separate chapters cover the emerging role of health in development, designing an appropriate approach to improved health service coverage, planning for the pragmatist, implementation, training for competence and relevance, primary health care programme operations, and practical evaluation for primary care programmes. (DP-E)

- 5018 Sombatsiri, K.** *Some items relevant to the consultation from the summary of the Third Plan evaluation*. In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 61-64. Engl. Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

In the agricultural sector, Thailand's Third Development Plan strategy is to promote the formation of agricultural institutions to benefit farmers through cooperative efforts in production and marketing and to encourage agricultural price stabilization. The plan also aims to aid the expansion and distribution of public health

services, especially in rural areas, where at present only about 15% of the population is served. (DP-E)

- 5019 Taylor, C.E.** *Implementation of national plans for action on primary health care; follow-up proposal for Alma Ata conference*. Bulletin of the Pan American Health Organization (Washington, D.C.), 13(1), 1979, 1-6. Engl.

Six major considerations for following up recommendations adopted at the Alma-Ata Conference are put forth; these include national commitment and political will, prompt implementation of a redesigned national health system, progressive research and adaptation for emerging problems, community participation and intersectoral involvement, evaluation and progressive improvement, and international commitment. The author also discusses the issues of funding for service activities, promoting national plans for action and training in planning and management, and health services research. (DP-E)

- 5020 Taylor, C.E.** *Primary health care in less developed countries*. Mount Sinai Journal of Medicine (New York), 45(5), Oct 1978, 673-677. Engl.

This paper summarizes some recent lessons learned from health care developments overseas in the hope that these lessons will be applied in the USA. These developments include the emphasis on the community rather than the individual as the principal unit for health care, the combination of preventive and curative services in primary care, the reallocation of roles in the health team and the increasing use of auxiliaries, and community participation. The author notes that US medical personnel have less and less to offer developing countries, even as consultants. (DP-E)

- 5021 Villod, M.T.** *Reflections of a strategy for education for health*. Children in the Tropics (Paris), (113), 1978, 2-35. Engl.

This special issue is intended for health educators who are attempting to set up programmes on a community level, taking into account the health policies of different countries. To be accepted, a health education strategy must adjust itself to the customary behaviour of the social environment, make use of dynamic sociological structures, and give priority to natural leaders. Separate sections of this issue cover understanding the community, approach techniques, choice of priorities, methods of action (examples include a community development agent in the Central African Empire, a school in Upper Volta, a village health committee in the Ivory Coast, a bush country clinic in Niger, and a hospital in Zaire), technical means of action, and evaluation. (DP-E)

- 5022 WHO, Alexandria.** *Health education with special reference to the primary health care approach*. International Journal of Health Education (Geneva), 21(2), Apr-Jun 1978, Suppl., 2-18. Engl. 29 refs.

The author discusses the potential contribution of health education to the primary care approach. Health education in this context is not an isolated exercise applied only occasionally, nor is it a substitute for other needed activi-

ties; it includes the whole spectrum of health education activities, each requiring its own specific inputs, which are determined by the needs, geographical situation, and available resources of the country. The most important educational aspect to consider is the conviction that, despite their circumstances, people have the freedom to change their own destiny. (DP-E)

5023 WHO, Geneva. Primary health care in the WHO regions. WHO Chronicle (Geneva), 32(11), Nov 1978, 431-438. Engl.

Also published in French, Russian, and Spanish. Excerpts from reports of six WHO regional directors prepared for the Alma-Ata Conference are presented. Primary care efforts and strategies in Africa, the Americas, Southeast Asia, Europe, the eastern Mediterranean, and the Western Pacific are examined. Topics discussed include financing, health services coverage, the PAHO/WHO technical cooperative plan, traditional medicine and practitioners, and research and development programmes. (DP-E)

5024 WHO, Geneva. UNICEF, New York. Alma-Ata 1978; primary health care. WHO, Geneva, 1978. 79p. Engl.

International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 Sep 1978. This document contains the declaration of Alma-Ata, the report of the 1978 Alma-Ata conference, and a reprint of the WHO/UNICEF joint report concerning primary health care. The conference report gives: background information; lists of participants, activities, etc.; a summary of the discussions; and recommendations. The joint report defines and outlines the concept of primary health care and includes sections on primary care and development, operational aspects, and national strategies (especially for developing countries) and international support. Special stress is laid on the need for maximum community and individual self-reliance for health development and for integration on a national basis of primary care and the health system in general with other sectors that contribute to a country's total development strategy. (RMB)

5025 WHO, Geneva. Promotion of national health services relating to primary health care and rural development; report by the Director-General. Geneva, WHO, Provisional Agenda Item 2.5.14, 12 Apr 1976. 8p. Engl.

Twenty-Ninth World Health Assembly, Geneva, Switzerland, 12 Apr 1976.

See also entry 5396.

This report reviews the past and ongoing activities of WHO's primary health care programme and indicates some planned future activities. An outline is provided of a recent WHO study on health and rural development. The linkages between health and development at the community level are seen as exceptional opportunities for introducing primary health care activities. The implications of these linkages for national health authorities and WHO are discussed. In particular, the need for closer and more clearly focused relationships with other

development agencies is stressed. (Modified journal abstract.)

5026 WHO, Geneva. Health implications in the development of the physical and social environments of human settlements; community development approaches for the improvement of health. Geneva, WHO, n.d. 30p. Engl. 21 refs.

Improvements in the health status of populations in developing countries can only be achieved through community-based development programmes with full community participation. This paper examines several approaches to such programmes, including those based on radical policy changes at the national level, a shift in emphasis within the existing system, and the development of local projects to solve specific problems. In all programmes, 1st steps comprise establishing proper communications and involving the community in planning, decision-making, and organization. Activities in the fields of nutrition education, food production, provision of health services and facilities, improvements in environmental conditions, and the use of traditional and professional health personnel are also discussed. (FM)

5027 Wyatt, G.B. Improving health in rural areas. Papua New Guinea Medical Journal (Boroko, Papua New Guinea), 20(3), Sep 1977, 100-101. Engl.

Despite Papua New Guinea's relatively well developed system of aid posts and health centres, there are still certain improvements needed in rural health services. A lack of motivation is noted in rural inhabitants, who fail to keep local health facilities in good repair. Health education, especially on the radio, might be used to encourage public interest in health matters. Training of village aides, utilization of already established missionary health workers, and full employment of previously trained aid post orderlies are possible solutions to manpower shortages. Community participation in development plans would also help to ensure their success. (DP-E)

5028 Yemen, Ministry of Health. WHO, Alexandria. National health programme, 1976/1977-1981/1982. Alexandria, WHO, Aug 1976. 200p. Engl.

The report presents the 5-year national health programme for the Yemen Arab Republic. Part 1 outlines new programme proposals in the areas of basic health services, immunization, health administration, hospital construction, health manpower development, and control of schistosomiasis, tuberculosis, and malaria, as well as on-going projects such as laboratory services, epidemiological studies, maternal child health care, and environmental health services. Part 2 presents health and health-related information and statistics on socioeconomic conditions, demography, health facilities and manpower, epidemiology, budgets, etc. The methodology used in the planning process to establish priorities is also described. (FM)

- 5029 Yokan, C., D'Onofrio, C.** *Application of health education methods to achieve higher immunization rates.* Public Health Reports (Rockville, Md.), 93(3), May-Jun 1978, 211-215. Engl. 15 refs.

Since it is estimated that some 25% of US children are not protected against the major preventable diseases, special programmes are essential to achieve higher immunization rates. The principles of health education and the possibilities of applying them to such programmes are explored. Motivation and convenient, affordable access to services are basic. Public awareness of the threat posed by poliomyelitis, diphtheria, pertussis, and tetanus must be increased and maintained. Federal funding for immunization research should be continuous and stable; in the past, episodic, intense campaigns have been followed by periods of apathy and dwindling support. (FM)

II.4 Geographical Distribution of Health Services and Workers

- 5030 Hamm, M.** *How to recruit and retain physicians for rural hospitals.* Hospital Medical Staff (Chicago, Ill.), 6(10), Oct 1977, 1-7. Engl.

This article on recruiting physicians for rural hospitals in the USA stresses the importance of an organized and ongoing (as opposed to crisis-provoked) recruiting process, an attractive benefit package, incentives such as an innovative delivery system, arrangements for vacation coverage and medical education leave, and spouse involvement in the physician's introduction to the community. Some obvious pitfalls to avoid, such as initiating contact too early or too late in the physician's education, are pointed out. (HC-L)

- 5031 Kane, R., Dean, M., Solomon, M.** *Overview of rural health care research.* Santa Monica, Cal., Rand Corporation, Rand Paper Series P-6110, Apr 1978. 67p. Engl. Refs.

This paper reviews the state of the art of rural health research and evaluation in the USA with particular emphasis on the questions of access, manpower (especially nurse practitioners and physician's assistants), and financing. The current state of knowledge in both the published and unpublished literature in each area is summarized and a series of unresolved issues is proposed (for example, whether or not rural health services should be expected to become financially self sufficient). A strategy for further research to include the various types of rural health care programmes is described. (DP-E)

- 5032 Kane, W.J.** *Rural health care; medical issues.* Journal of the American Medical Association (Chicago, Ill.), 240(24), 8 Dec 1978, 2647-2650. Engl.

Problems in the provision of health care to rural areas of the USA include the distribution of health workers, health care facilities, preventive services, quality of care, and economics. These problems must be clearly identified and defined if solutions are to be effective and the

cooperation of several sectors of the community is required. Community organization and political activity are often necessary to convince legislators and medical schools to assist rural communities in their solution. (DP-E)

- 5033 Republic of Mexico.** *Mexique; programme d'accroissement de la couverture des services de santé primaires en milieu rural. (Mexico; programme for increasing primary health care services coverage in rural areas).* Mexico City, n.p., 1978. 30p. Fren.

This illustrated report discusses the policy of the Mexican government aimed at increasing basic health services in rural areas. It outlines the 3-tiered organizational structure that consists of rural hospitals serving 15 000-60 000 inhabitants, rural clinics for towns of 2 500-14 999 and rural medical posts in settlements of 500-2 499. It is estimated that by 1982 there will be 240 rural hospitals, 1 500 clinics, and 12 000 medical posts. The activities, staff requirements, and referral policies of each centre are described. The emphasis on local participation is reflected in the creation of health committees, who are responsible for heightening public awareness of and support for health matters. (FM)

II.5 Financial Aspects

See also: 4915, 4916, 5162, 5186.

- 5034 Boyar, R.L.** *Flexibility planning keys cost-effective construction.* Hospitals (Chicago, Ill.), 52(9), 1 May 1978, 79-83. Engl.

Long term savings can be realized if hospital buildings are designed with change in mind. This paper describes a number of ways in which the elements of flexibility can be incorporated into the basic design of a facility, pointing out that "a combination of long-span design with interstitial space, void of interior vertical elements within the building proper, might provide the universal building space amenable to almost any change that future needs might improve." (HC-L)

- 5035 Lall, S.** UNIDO, Vienna. *Growth of the pharmaceutical industry in developing countries: problems and prospects.* New York, UN, 1978. 47p. Engl.

This book covers: production of and trade in pharmaceutical products; problems of pharmaceutical production and provision in developing countries, particularly imports, domestic production, and marketing and distribution; new policies on pharmaceuticals, including the priority drug list, national drug-buying agencies, local research and development, local production, and marketing and information; and the role of UNIDO. Annexes contain statistical data on pharmaceutical production and sales. (DP-E)

- 5036 Mach, E.P.** *Financing of health systems in developing countries: discussion paper.* Social Science and Medicine (Oxford, UK), 12(1C/2C), 1978, 7-11. Engl. 16 refs.

Estimates of all sources providing financing for health activities and of total expenditure in the health sector are essential information for national health policy planners. Only if government officials coordinate health planning in both public and private sectors can they hope to succeed. Lack of funds, inequitable distribution of available funds, insufficient coordination between different sources of financing, and inadequate attention to cost and efficiency aspects are identified as major problems of health sector financing in developing countries. It is proposed that health planners go beyond the conventional limits of public health and attempt to match the financing of the total sector with health policy goals. Low cost estimating methods should be developed for this purpose. (Modified journal abstract.)

II.6 Cultural Aspects

See also: 5141.

5037 Abcede, J.C. *Women-power in Korea.* World Health (Geneva), Jan 1979, 16-19. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish. Founded only 10 years ago, mothers' clubs in the Republic of Korea now have more than 2.5 million members and are helping to change antiquated social attitudes toward women. Village clubs, which were originally established to encourage family planning and facilitate the distribution of contraceptives, now carry out a variety of activities, including health education, vaccination programmes, environmental improvements, and the organization of group labour during harvest or planting time. A case history of a village savings union and a cooperative store is one illustration of the success of these clubs. (DP-E)

5038 Ademuwagun, Z.A. *"Alafia"-the Yoruba concept of health; implications for health education.* International Journal of Health Education (Geneva), 21(2), Apr-Jun 1978, 89-97. Engl.

Also published in French, German, and Spanish. In the Yoruba (Nigeria) culture, sickness can be either physical or sociopsychological. Yoruba methods of diagnosis and treatment are discussed and the implications of traditional concepts for health education are examined. The author suggests a 7-point strategy to assist the health worker who is not familiar with Yoruba beliefs: explain, stress, and demonstrate the value of modern health services over the traditional approach; help the consumer to take full advantage of modern health services; encourage correct drug dosage; emphasize the dangers of self-medication; discourage the simultaneous use of modern and traditional drugs; stress the difference between physicians and pharmacists; and help the hard-to-reach patient. (DP-E)

5039 Agarwal, A. *Eye of newt and toe of frog.* New Scientist (London), 80(1127), 2 Nov 1978, 367-369. Engl.

A number of attempts have been made by national governments (the People's Republic of China, India, Viet-

nam, etc.) to utilize traditional herbal preparations as an alternative or adjunct to expensive Western pharmacopoeia. The more successful of these attempts have been due to a willingness to adopt herbs that traditional records and present experience have shown to be useful without first subjecting them to modern pharmacological analysis. This paper discusses the role of traditional herbal preparations in meeting the world's drug needs, pointing out the necessity of documenting their existence before traditional societies are engulfed by modern civilization and of exercising caution in their exploitation. (HC-L)

5040 Baasher, T.A. WHO, New Delhi. *Traditional medicine in Eastern Mediterranean countries.* In Report of the Consultation on the Promotion and Development of Traditional Medicine Programme, New Delhi, WHO, 1976, Annex 5(c), 14p. Engl. 13 refs.

Inter-regional Consultation on Promotion and Development of Traditional Medicine Programme, New Delhi, India, 4-8 Oct 1976.

For complete document see entry 5059.

The Middle East has a rich heritage of traditional medical lore from the Egyptian, Persian, Babylonian, and African cultures. The author discusses the concepts of disease and health in traditional medicine, categories of traditional practitioners, and approaches and techniques used in traditional methods. Official, professional, and popular attitudes towards traditional medicine are examined. A training programme for traditional midwives in the Sudan and special schools for traditional practitioners in Pakistan are cited as examples of traditional practitioner training. (RMB)

5041 Binitie, A. *Psychological basis of certain culturally held beliefs.* International Journal of Social Psychiatry (London), 23(3), 1977, 204-208. Engl.

Although belief in witchcraft, the spirit world, and the evil machinations of an enemy is common in Nigeria, only a proportion of mentally ill patients attempt to use this cultural mechanism to explain their illnesses. Those who do use it are generally suffering from depression rather than anxiety-related illnesses. A number of case histories are presented to illustrate this point. (DP-E)

5042 Binitie, A. *Mental health implications of economic growth in developing countries.* Mental Health and Society (Basel, Switzerland), 3(5-6), 1976, 272-285. Engl. 26 refs.

The effects on mental health of social, political, and economic changes in Africa are examined from a historical perspective. The social and political situation in precolonial times is compared to the present. Rapid economic expansion by European powers in the 1900s led to the opening up of Africa and the resulting mass migrations, urbanization, and break-up of traditional ways of life and values. The rural poverty and urban overcrowding that followed have had serious effects on both physical and mental health. Not enough attention has been paid to these problems and there is an urgent

need for all developing nations to deal with the difficulties of adapting to change. (FM)

- 5043 de Rosny, E. Ndimisi; ceux qui soignent dans la nuit. (Ndimisi; healers of the night).** Yaoundé, Editions CLE, Etudes et documents africaines, 1974. 328p. Fren.

The author presents 10 case studies of traditional practitioners collected during 3 years of observation in the town of Douala, Cameroon. He reveals the system of social organization and cultural beliefs to which the healer belongs and emphasizes the importance of the family structure. Through descriptions of actual seances he discusses sorcery, methods of treatment, and interpretation of dreams. Section 2 studies possession by spirits and the rituals involved in exorcising evil spirits. (FM)

- 5044 Diesh, P. WHO, New Delhi. *Traditional medicine and its role in the development of health services in South-East Asia region.*** In Report of the Consultation on the Promotion and Development of Traditional Medicine Programme, New Delhi, WHO, 1976, Annex 5(d), 1v.(various pagings). Engl. Refs.

Inter-regional Consultation on Promotion and Development of Traditional Medicine Programme, New Delhi, India, 4-8 Oct 1976.

For complete document see entry 5059.

A brief review of traditional medicine in Southeast Asia covers formalized traditional systems (Ayurveda and Yoga, Unani-Tibbi, Siddha, Amohi, and the Chinese system), non-formalized systems (herbalists, the Thaud, and Mantras and Tantras), and traditional birth attendants. Annex 1 to this paper lists the resolutions of the Regional Committee for South-East Asia concerning traditional medicine. Additional annexes contain more detailed accounts of the traditional systems and practitioners in Bangladesh, India, Indonesia, Nepal, and Sri Lanka. Statistical data are included. (RMB)

- 5045 Emery, G. WHO, New Delhi. *Traditional healers.*** In Report of the Consultation on the Promotion and Development of Traditional Medicine Programme, New Delhi, WHO, 4 Oct 1976, Annex 5(e), 4p. Engl.

Inter-regional Consultation on Promotion and Development of Traditional Medicine Programme, New Delhi, India, 4-8 Oct 1976.

For complete document see entry 5059.

Traditional medicine systems in the Western Pacific region can be grouped into four categories: herbal medicine (e.g., Laotian herbalists), macro-religious treatment (Papua New Guinean sorcerers), psychosomatic treatment (Philippine faith healers), and traditional birth attendants, who are almost universal. Their role is most evident in underserved rural communities, where they sometimes exist in harmony with modern medicine. (RMB)

- 5046 Goyea, H.S. *General and specific problems of field work in child health care; Benin City.*** Journal of Tropical Pediatrics and Environmental

Child Health (Kampala), 24(4), Aug 1978, 167-170. Engl.

The problems facing child health workers engaged in community and field work in Benin City, Nigeria, are many and varied. Difficulty in locating addresses because of language problems, unofficial street names, and parent mobility is a major obstacle to home visits. The multiplicity of languages in the area also hampers communication, as do the often hostile attitudes of parents. Inadequate health and environmental facilities, coupled with the difficulties of bringing about changes in individual health-related behaviour, are other important factors. Poverty, staff shortages, inaccessibility of patients, and a poor referral system add to the difficulties of providing and maintaining proper care. (FM)

- 5047 Hamdard National Foundation, Pakistan. *Hamdard medicus.*** Karachi, Hamdard National Foundation. Engl.

This journal is published quarterly by Pakistan's Hamdard National Foundation to promote research in traditional and modern medicine, health, science, and the history of science and medicine. Although the emphasis seems to be on Asia and the Muslim tradition, health systems and problems in other countries are also examined. A typical issue contains articles on herbal remedies, ancient medical systems, environmental health, etc. (DP-E)

- 5048 Hosken, F.P. *Epidemiology of female genital mutilations.*** Tropical Doctor (London), 8(3), Jul 1978, 150-156. Engl. Refs.

This paper reviews the medical and anthropological literature on female genital mutilations and examines the practices of 11 African countries. There are two types of operations: clitoridectomy and infibulation. Only in the Sudan is there specific legislation forbidding female circumcision; other countries seem to condone, if not encourage, it. The author feels that the present extent of genital mutilation is such that it should be treated as a public health problem and its prevention should be part of every African health programme. (Modified journal abstract.)

- 5049 Hull, D. *Migration, adaptation, and illness: a review.*** Social Science and Medicine (Oxford, UK), 13A(1), Jan 1979, 25-36. Engl. 98 refs.

The exploration of environmental influences offers the most promising leads in explaining variations in risk, both between countries and between social and cultural groups, for heart disease, hypertension, certain types of cancer, etc. Literature on migration compares migrants with genetic kin, non-related countrymen who stayed at home, their own progeny, those of the same environment but not the same background, and those who migrated at different stages of the life cycle. A group of studies dealing with migration and illness are reviewed in the context of competing theories about the selection, motivation, and adjustment of different migrant groups and about the meaning of migration as a social and psychological phenomenon. (Modified journal abstract.)

- 5050 Imperato, P.J.** *African folk medicine: practices and beliefs of the Bambara and other peoples.* Baltimore, Md., York Press, 1977. 251p. Engl.

The traditional medical practices and beliefs of various African tribes are examined, with emphasis on those of the Bambara people of Mali. Separate chapters cover the demographic background of the Bambara, the therapeutic process, disease causation and the spirit world, Bambara social organization and religious beliefs, folk medicine, mental illness, fertility and reproduction, childhood diseases, measles, communicable diseases in adults, chronic diseases, smallpox, traditional surgery, traditional dentistry, snakebites and other bites and stings, and the traditional African pharmacopoeia. Appendices contain a glossary and a synopsis of the major disease problems in Africa and there is an index. (RMB)

- 5051 Kleinman, A., Eisenberg, L., Good, B.** *Culture, illness, and care; clinical lessons from anthropologic and cross-cultural research.* Annals of Internal Medicine (Philadelphia, Pa.), 88(2), 1978, 251-258. Engl. 66 refs.

Major health care problems such as patient dissatisfaction, inequity of access to care, and increasing costs no longer seem amenable to traditional biomedical solutions. Concepts derived from anthropologic and cross cultural research may provide an alternative framework for identifying issues that require solution. A limited set of such concepts is described and illustrated, including a fundamental distinction between disease and illness. These social science concepts can be developed into clinical strategies with direct application in practice and teaching. (Modified journal abstract.)

- 5052 Odejide, A.O., Sanda, A.O., Olatawura, M.O., Oyene, A.O.** *Some socio-psychiatric attributes of patients utilizing the facilities of the traditional healers in the city of Ibadan.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(1), 1978, 115-119. Engl. 14 refs.

Over a 6-month period, 103 psychiatric patients admitted to 15 traditional healing centres in Ibadan, Nigeria, were interviewed and diagnosed by a psychiatrist. The patients were found to be representative of the general population in terms of social and educational status; they exhibited, in order of frequency, schizophrenia (48.5%), drug-induced psychosis (13.9%), and various forms of affective disorder (11.9%) and expressed a preference for traditional over modern treatment in 38.9% of all cases (no preference was expressed in 42.6%). A number of implications for cooperation between traditional and modern systems are extrapolated from these findings. (HC-L)

- 5053 Pilisuk, M., Froland, C.** *Kinship, social networks, social support and health.* Social Science and Medicine (Oxford, UK), 12(4B), Oct 1978, 273-280. Engl. 58 refs.

Urbanization and mobility have not destroyed the extended family but have greatly decreased its utility for continuous and reliable support in the USA and elsewhere. The loss or absence of familiar networks of social

support has been linked to coronary disease, pregnancy disorders, accidents, suicides, mental breakdowns, school truancy, ulcers, and recovery from certain types of cancer. Such findings suggest the general immunological value that may be obtained from the nurturance of social support networks and the authors urge that the contribution of these networks be explored in detail. (Modified journal abstract.)

- 5054 Slaby, D.** *Potential development of native health care in Cook Inlet region.* Alaska Medicine (Anchorage, Alaska), 20(6), Nov 1978, 80-86. Engl.

The history of native health services in Alaska is traced. Traditional cultural values that have influenced the design of the system, including respect for individuality and limitations of resources utilization, are examined. The author discusses the need to design a system that will continue to respect these traditional values and outlines the advantages and disadvantages of several optional models: an Indian Health Service (IHS) with Cook Inlet Native Association (CINA) board involvement, CINA programmes supplemental to IHS, a CINA prepaid ambulatory care programme with IHS back-up, a CINA prepaid ambulatory care programme with contract back-up, and a contract with the private sector. (DP-E)

- 5055 Velimirovic, H., Velimirovic, B.** WHO, New Delhi. *Notes on traditional healers; from the perspectives of the Americas.* In Report of the Consultation on the Promotion and Development of Traditional Medicine Programme, New Delhi, WHO, 4 Oct 1976, Annex 5(b), 1v.(various pages). Engl. Refs.

Inter-regional Consultation on Promotion and Development of Traditional Medicine Programme, New Delhi, India, 4-8 Oct 1976.

For complete document see entry 5059.

In this paper, the authors discuss, with reference mainly to Indian groups in Central and Latin America, reasons why these populations prefer traditional medicine, types of traditional healers, characteristics of traditional medicine, the patient of the traditional healer, and the prospects for integrating traditional medicine into modern medicine. Included are bibliographies of English and Spanish references concerning folk or ethnomedicine in Spanish and Portuguese America, the Caribbean, and Colombia and among Spanish Americans in North America. The paper closes with a summary. (RMB)

- 5056 Wanbe, I.** *Rehabilitating African traditional medicine.* Africa (London), 82, Jun 1978, 95-96, 99. Engl.

Case histories illustrate the effectiveness of traditional medicine in treating such varied health problems as infected wounds, compound leg fractures, and mental illness. After years of suppression, efforts are being made to integrate traditional medicine into established health services, as in the People's Republic of China. Practical problems that must be solved include the classification and training of traditional practitioners, the separation of harmful from beneficial practices, legal aspects, and

cooperation between traditional and Western practitioners. Discussions at a WHO seminar on traditional medicine are summarized. (DP-E)

5057 WHO, Brazzaville. *Traditional medicine and its role in the development of health services in Africa*. In Report of the Consultation on the Promotion and Development of Traditional Medicine Programme, New Delhi, WHO, 23 Jun 1976, Annex 5(a), 26p. Engl. Refs.

Inter-regional Consultation on Promotion and Development of Traditional Medicine Programme, New Delhi, India, 4-8 Oct 1976.

For complete document see entry 5059; originally published in French.

Separate sections of this WHO report on traditional medicine in Africa cover: definitions of traditional medicine and the traditional healer; traditional medicine in the African sociocultural context; methods and techniques of traditional African medicine; positive and negative aspects; traditional medicine and modern medicine; the situation of traditional medicine in the African region; traditional medicine and health care, especially primary care; research and dissemination of information on traditional medicine; and training of traditional healers and health team members. Conclusions and recommendations are included. (RMB)

5058 WHO, New Delhi. *Promotion and development of traditional (or indigenous) medicine programme*. In Report of the Consultation on the Promotion and Development of Traditional Medicine Programme, New Delhi, WHO, 8 Oct 1976, Annex 6, 8p. Engl.

Inter-regional Consultation on Promotion and Development of Traditional Medicine Programme, New Delhi, India, 4-8 Oct 1976.

For complete document see entry 5059.

WHO encourages the study of traditional medicine in order to foster a realistic approach to it, explore its merits in the light of modern science for the purpose of maximizing useful practices and discouraging harmful ones, and promote the integration of traditional and Western medicine. Guidelines and a plan of action for this study are presented in this paper. By 1980, WHO hopes to have assisted each country to establish a government policy concerning traditional medicine, collected all available information concerning traditional practitioners, developed training programmes for traditional practitioners, etc. (RMB)

5059 WHO, New Delhi. *Report of the Consultation on the Promotion and Development of Traditional Medicine Programme*. New Delhi, WHO, 1976. 1v.(various pagings). Engl. Refs.

Inter-regional Consultation on Promotion and Development of Traditional Medicine Programme, New Delhi, India, 4-8 Oct 1976.

See also entries 5040, 5044, 5045, 5055, 5057, and 5058.

This 1976 consultation was held to draw up guidelines for the utilization of traditional practitioners in primary

care programmes and for the provision of appropriate health technology based on traditional medicine. This report briefly describes the proceedings of the meeting. Included with it are annexes containing: the agenda; a list of participants; the opening addresses; position papers presented by representatives from WHO's regional offices in Africa, the Americas, the Eastern Mediterranean, Southeast Asia, and the Western Pacific; a paper on the promotion and development of traditional medicine; and a list of people interviewed at meetings and discussions. Statistical data appear in many papers. (RMB)

5060 Zaki Hasan, K. *Bringing health care back to the people*. Assignment Children (Geneva), 42, Apr-Jun 1978, 19-25. Engl.

The author maintains that, if history had taken its logical course and the traditional medical systems in many developing countries had not been disrupted and destroyed by the imposition of colonial rule and values, these traditional systems would have continued to progress and illness and death would have declined in the manner they have in Western societies. Since traditional systems have been destroyed and discredited and Western systems are inadequate and inappropriate for developing countries, primary care is advocated as the most acceptable alternative. (DP-E)

II.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition, and Disease Control Studies

See also: 4902, 4913, 5199, 5306, 5322, 5333, 5460, 5484, 5489, 5518, 5526, 5591.

5061 Acuna, H.R. *Problems of venereal infections in Latin America and the Caribbean and means of fighting them*. Bulletin of the Pan American Health Organization (Washington, D.C.), 12(1), 1978, 1-6. Engl.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 1979.

The epidemiology of venereal diseases in the Caribbean and Latin America is contrasted with that of both more developed and less developed areas of the world. Three specific opportunities for improving preventive and curative services are pointed out: more effective utilization of social security institutions in Latin America, incorporation of venereal disease services into primary care programmes, and development of pilot projects in the smaller Caribbean territories. The recruitment of a PAHO epidemiologist in venereal diseases in Jamaica also opens up a new area for PAHO technical assistance that could be extended elsewhere. Statistical data are included. (DP-E)

5062 Adekolu-John, E.O. *Significance of migrant Fulani for human trypanosomiasis in Kainji Lake area of Nigeria*. Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1978, 285-293. Engl. 10 refs.

The transhumance-route followed by the Fulani around

the Lake Kainji area of Nigeria is presented. From January-February 1977, 130 Fulani, mostly farmers and tribesmen aged 20-60 years, were interviewed. Less than 15% of the respondents had previous knowledge of human sleeping sickness. Although examination of thick and thin blood films did not reveal any blood trypanosoma, the transhumance pastoral morbidity will be an important factor in any future outbreak of human trypanosomiasis in the area. Statistical data are included. (Modified journal abstract.)

- 5063 Ahmad, K.** *Model for nutritional improvement programmes in the rural areas of Bangladesh through participation of the university.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 183-184. Engl.
Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

This project's objective was to conduct an experimental nutrition programme in four Bangladesh villages for the purpose of developing a model for nutrition improvement in rural areas. It also aimed to involve rural women in the development process. After surveys and planning activities were completed, specific project activities included water supply construction, improvement of food supplies and production, financing of 1 200 latrines, establishment of a hospital, training, electrification, etc. (DP-E)

- 5064 Almeida Machado, P. de Brazil's special schistosomiasis control program: the model.** Bulletin of the Pan American Health Organization (Washington, D.C.), 13(1), 1979, 33-45. Engl.
Also published in Portuguese in *Boletín de la Oficina Sanitaria Panamericana*, 1979.

The basic approach and concepts of Brazil's new Special Schistosomiasis Control Programme are described. It seeks to reduce the snail population of predefined areas through appropriately synchronized chemotherapy and pest control supported by health education, improvement of basic sanitation, and provision of potable water. Its three phases-preparatory, attack, and surveillance-are examined. It is felt that, at present, control of schistosomiasis in rural areas is feasible in the short run through this programme but that total eradication is improbable because of the likelihood that migrating carriers from the city will reintroduce the disease. (Modified journal abstract.)

- 5065 Argüelles, F.** *Desnutrición; 1: generalidades. (Malnutrition; 1: general features).* Revista Española de Pediatría (Zaragoza, Spain), 34(203), Sep-Oct 1978, 379-390. Span. 56 refs.
This paper reviews the definition, aetiology, pathology, and clinical manifestations of malnutrition in children and describes the various anthropometric and biochemical methods of diagnosing it. (HC-L)

- 5066 Arya, S.C.** *Iron deficiency anaemia: its prophylaxis and management.* Current Medical Practice (Bombay, India), 20(10), Oct 1976, 471-474. Engl. 15 refs.

Quite prevalent in tropical countries, iron deficiency anaemia can be caused by prematurity, haemorrhage, infection, congenital disease, malnutrition, malaria, schistosomiasis, dysentery, etc. Daily iron requirements by age and methods of administration are listed. Proper management of the disease is based on the correction of dietary deficiencies, treatment of any underlying cause such as renal failure or infection, removal of any toxic chemicals or drugs, administration of any nutrients that are lacking, and blood transfusion. A method of calculating the amount of supplemental iron needed is described. (DP-E)

- 5067 Baker, S.J.** *Nutritional anaemia: a major controllable public health problem.* Bulletin of the World Health Organization (Geneva), 56(5), 1978, 669-675. Engl.

Also published in French and Spanish.

Nutritional anaemia is the most widespread type of anaemia and the most easily controlled by public health measures. Although it is largely caused by iron deficiency, folate deficiency and, more rarely, vitamin B12 deficiency are also contributing factors. The nutrient balance in a normal, well-nourished individual is described, along with the required amounts of iron and folate. Control measures must begin with population surveys to determine the prevalence of the disease. Following well-planned pilot and field trials, a combined programme of iron and folate supplementation, diet fortification, parasite control, and educational campaigns can be carried out as necessary. (FM)

- 5068 Balakrishnan, S., Haji Hussein, H. bin Breast feeding in Kelantan.** Medical Journal of Malaysia (Singapore), 32(1), Sep 1977, 22-24. Engl.

In May 1976, all women attending maternal child health clinics at the main health centre in north Kelantan (Malaysia) were interviewed using a questionnaire. Of 461 infants, 438 were breast-fed at least once daily, although only 86 of these were given breast milk exclusively, despite the fact that the women knew that breast-feeding was best. This low incidence of breast-feeding should be considered in the next Ministry of Health breast-feeding campaign. It was also felt that the early introduction of solid food contributed to the high incidence of illness and death, a fact that should also be stressed in health education. (Modified journal abstract.)

- 5069 Bhumiratana, A.** *Feeding of vulnerable groups in Thailand.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 65-71. Engl.
Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

Under Thailand's Third National Economic and Social Development Plan (1972-1976), child nutrition centres

were established to serve some 15 000 preschoolers aged 1-5 years, an experimental school lunch programme offered supplements to 2 400 students, and infant formulae were developed to replace imported milk powder. The 4th national plan provided additional nutrition activities in the form of nutrition education to mothers (with emphasis on breast-feeding), improved food delivery and quality control systems, and better training of personnel. Planning, organization, and financing of these activities are discussed. (DP-E)

5070 Bogel, K. *Rabies*. World Health (Geneva), Oct 1978, 22-25. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Although it is generally understood that rabies control programmes depend on an efficient surveillance system to measure their success, there are many examples in developing countries of control programmes that function without sophisticated networks of diagnostic centres. These programmes depend on public awareness and community participation, especially in immunization campaigns for domestic animals. Rabies foci among vampire bats and wild animals require other methods, such as injecting cattle with anticoagulants fatal to bats or reducing a stricken animal population long enough to interrupt the chain of infection. Recent progress in rabies treatment is described. (DP-E)

5071 Bourne, G.H. ed(s). *World review of nutrition and dietetics*. Basel, Switzerland, S. Karger. Engl. Refs.

This irregularly-published series carries research papers on themes relevant to human and/or animal nutrition. Each hard-backed issue has its own title, descriptive abstract, and detailed table of contents. This format, plus the extensive references that it makes available, make the series a useful reference tool. (HC-L)

5072 Brash, A.A. *Treatment of tetanus, an appraisal*. Christian Medical Association Journal of India (Mysore, India), 52(5), 1977, 229-234. Engl. 27 refs.

Because the incidence and severity of tetanus outbreaks vary, treatment trials must be measured against cases of comparable severity occurring at the same time, in the same place, and in sizeable numbers. A review of the literature reveals the shortcomings of existing trials in this regard. The author is about to set up a trial of adrenal steroids and hopes that others might do the same for anti-tetanus serum and diazepam. In the meantime, he recommends managing the disease with a single dose of 10 000 units of anti-tetanus serum, administered intravenously, along with appropriate sedation and, if necessary, muscle relaxants and assisted ventilation. (HC-L)

5073 Brilliant, L.B., Hodakevic, L.N. *Certification of smallpox eradication*. Bulletin of the World Health Organization (Geneva), 56(5), 1978, 723-733. Engl.

Also published in French and Spanish.

This paper discusses the problems involved in certifying as smallpox-free those countries in which the disease has been nonendemic for some years but which have not yet received a certificate of eradication. One such country is Burma, which was certified free of smallpox in 1977, some 8 years after its last reported case but 2 years after the last case in Bangladesh, with which it shares a long frontier. The procedure used and the lessons learned in Burma are described. Statistical data are included. (Modified journal abstract.)

5074 Briscoe, J. *Role of water supply in improving health in poor countries (with special reference to Bangla Desh)*. American Journal of Clinical Nutrition (Bethesda, Md.), 31(11), Nov 1978, 2100-2113. Engl.

Despite the fact that rural people often continue their traditional water use habits even when alternative sources of pure water are available, the author suggests that the fault lies not so much with the people as with the process of decision-making on water improvement programmes. In support of this position, he examines several research issues concerning water supply and health, including the effect of water supply on health, the use of classical waterborne diseases (e.g., cholera) as models for water-related diseases, and the specification of water supply standards. Studies and observations concerning cholera in Bangladesh are used to illustrate a number of hypotheses about the contribution of safe water supplies to disease control. (DP-E)

5075 Brown, R.E. *Relactation with reference to application in developing countries*. Clinical Pediatrics (Philadelphia, Pa.), 17(4), Apr 1978, 333-337. Engl. 26 refs.

Relactation is the physiological process of reinitiating the production of human milk by suckling, appropriate drugs, or other stimulation. There are three requirements for successful lactation and relactation: a healthy woman interested in nursing her infant, a healthy infant, and support for the mother, which may be provided by the father, grandmother, midwife, physician, friend, etc. Relactation is important in developing countries, where normal lactation is often interrupted by sickness of the mother or infant, to avoid the use of improperly prepared or contaminated infant foods. (DP-E)

5076 Bryceson, A.D. *Rehydration in cholera and other diarrhoeal diseases*. In Technologies for Rural Health, London, Royal Society, 1977, 109-114. Engl. 8 refs.

Royal Society Discussion of Technologies for Rural Health, London, UK, 9-10 Dec 1976.

For complete document see entry 5225.

For the control of cholera and childhood diarrhea in developing countries, oral treatment with glucose-electrolyte solution is usually adequate on its own, with intravenous fluids as necessary. The large-scale success of this treatment depends upon the villagers' understanding and acceptance of replacement therapy. Several schemes have shown that oral rehydration for childhood diarrhea can be successfully carried out in the home

provided that the proper fluids are available and that the mother can be adequately trained. Centres for intravenous rehydration and education of mothers are also necessary, but costs can be kept down, especially if intravenous fluids are made locally. Such centres would be particularly useful in treating epidemic diarrhea such as cholera. (Modified journal abstract.)

- 5077 Bullock, R., Gelfand, M.** *Pre-adolescent resistant rickets in the African: a probable new syndrome.* Central African Journal of Medicine (Salisbury), 23(10), Oct 1977, 217-227. Engl. 13 refs.

Eleven cases of Vitamin D resistant rickets in South Africa are reviewed and diagnostic criteria and guidelines for management are discussed. Features of significance in this small series were the relatively large number of adult-onset hypophosphataemic cases, in the face of their acknowledged rarity, and the absence of cases of Fanconi syndrome or renal tubular acidosis. Two cases also had a severe form of bilharzial uropathy. Statistical data are included. (Modified journal abstract.)

- 5078 Carayon, A.** *Effets de la malnutrition sur la propagation, la gravité et les infirmités de la lèpre.* Médecine Tropicale (Marseille, France), 37(4), Jul-Aug 1977, 395-404. Fren. 93 refs. Seminar on Leprosy, Teheran, Iran, Jun 1976.

An analytical review of current research on leprosy indicates that protein-calorie malnutrition may affect the immunological status of leprosy patients through changes in immunoglobulins, specific antibodies, and cell-mediated responsivity. The role of fatty acids is also discussed and the theory of the oxidation of lipids being a cause of leprosy is outlined. The therapeutic effects of certain fatty acids are noted and other nutritional deficiencies such as iron and vitamins A and B also play a role. Further research must be undertaken to discover the full effects of nutrition on leprosy. (FM)

- 5079 Centro Internacional de Investigaciones para el Desarrollo, Oficina Regional para la América Latina, Bogotá.** *El Salvador: sector salud. (El Salvador: health sector).* Bogotá, Centro Internacional de Investigaciones para el Desarrollo, Jan 1978. 19p. Span.

The 1st part of this document gives background information on El Salvador plus some demographic and health indicators such as birthrate, growth rate, mortality, leading causes of death, etc. The 2nd part sets forward the general aims of the country's health policy and reviews the programme and research projects being carried out in El Salvador by the Ministry of Public Health and Social Assistance, the Institute of Medical Research, the School of Nutrition and Dietetics, the Faculty of Medicine, and the Nutrition Institute of Central America and Panama (INCAP), Guatemala. (HC-L)

- 5080 Chinese Centre for International Training in Family Planning, Taichune, Taiwan.** *Operations research in a population/family planning pro-*

gram. Taichune, Taiwan, Chinese Centre for International Training in Family Planning, n.d. 13p. Engl.

This family planning training course outline covers these subjects: promotion of acceptance, cost-effectiveness of programme operation, field personnel management, use of the private sector, types of field approaches, collecting field information, and compensation (incentive) schemes. Each subject contains a list of relevant studies conducted in Taiwan. Charts on methods of family planning recruitment and education and their results are appended. (Modified journal abstract.)

- 5081 Choudhry, A.W.** *Environmental health; introduction.* AFYA (Nairobi), 12, Jan-Feb 1978, 19-21. Engl.

Physical, biological, and social factors that influence the environment are examined. Poor environmental conditions, such as contaminated water supplies, pollution, inadequate housing, etc., can contribute to the spread of disease and are often aggravated by traditional beliefs and superstitions. Environmental health in rural areas can best be promoted by ensuring that these conditions are met: safe water supplies, proper refuse disposal, safe disposal of human excreta, food hygiene, adequate housing, and vector control. (DP-E)

- 5082 Chouhan, B.S.** *Concept of desert medicine.* Current Medical Practice (Bombay, India), 21(5), May 1977, 215-218. Engl. 12 refs.

The problems peculiar to desert medicine are examined; these include heat-related conditions, sweating disorders, dehydration, skin diseases due to sunlight and low humidity, respiratory conditions aggravated by sandstorms, exposure to cold at night, etc. Guidelines for desert living advise the desert dweller to cover most of the body surface, wear white, stay in the shade whenever possible, work at night, sit hunched at noon, eat low-protein food, drink water with and between meals, always set out with both stomach and canteen full of water, and never go out into the desert without water, petrol, and a trackguide. Doctors should impress these preventive measures on their patients. (DP-E)

- 5083 Cornet, R., Jan, C., Coz, J.** *Place de l'homme dans les cycles épidémiologiques de la fièvre jaune en Afrique de l'ouest. (Place of man in the epidemiological cycles of yellow fever in West Africa).* Médecine Tropicale (Marseille, France), 37(3), May-Jun 1977, 265-268. Fren. 9 refs.

Taking into account the effects on humans of yellow fever during the past 10 years in West Africa, the authors believe that man may be affected by the virus in three different epidemiological ways: urban yellow fever, which only involves domestic vectors and man; sylvan yellow fever, which involves feral vectors and monkeys; and a 3rd type, intermediate, in which the four factors of feral and domestic vectors, man, and monkeys are involved. Though schematic, this classification has practical implications for preventing or controlling epidemics. (Modified journal abstract.)

- 5084** Crepin, G., Leroy, M., Dehaene, P., Delahousse, G., Decocq, J. *Facteurs de haut risque gravidique déterminant le pronostic foetal immédiat; étude de 1000 observations. (Risk factors in pregnancy that affect the immediate foetal prognosis; a study of 1 000 cases).* Revue Française de Gynécologie et d'Obstétrique (Paris), 72(7-9), 1977, 499-509. Fren.

This study concerns 1 000 at-risk pregnancies selected from among 5 861 pregnancies with an overall perinatal death rate of 1.2%. Factors that determine fetal prognosis include pregnancy duration of less than 36 weeks, birth weight of less than 2 500 g, hypotrophy, perinatal death, and the Apgar score in the 1st minute. A review of causes of death shows that 50% can be attributed to marked prematurity and hypertension during pregnancy. Factors that enhance the risk to the neonate are lack of antenatal checks, certain etiologies that are high-risk factors in themselves, and the combination of several aetiologies, which increases the risk considerably. (Modified journal abstract.)

- 5085** Cutting, W.A. *Cassava; a valuable food but a possible poison.* Tropical Doctor (London), 8(3), Jul 1978, 102-103. Engl. 10 refs.

The poisonous nature of cassava has long been recognized in every country in which it is used. Hydrocyanic acid (HCN), the poisonous element, is present in greater amounts in "bitter" or in damaged cassava and lesser amounts in the "sweet" variety. There are many traditional ways of preparing the tubers to decrease the HCN, including soaking, washing in running water, boiling, roasting, and pounding. Although cassava is low in protein, its high calorie content makes it a valuable food as long as it is properly processed. To avoid toxicity, the traditional methods of preparing cassava will have to be improved with the assistance of appropriate village technology. (DP-E)

- 5086** Dayal, M.S. *Integrated child development services in India.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 90-122. Engl.

Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

The Integrated Child Development Services (ICDS) are an experiment in integrated child health services as a step toward human resources development in India. Nutrition is an important component in these services. Thirty-three experimental ICDS projects have been established in different parts of the country; these projects are at different stages of development and have yet to be evaluated. This study is based on secondary data and observations. (DP-E)

- 5087** Dayal, R.S., Kumar, R., Kalra, K. *Infant growth survey at Agra: experiences and shortcomings.* Indian Pediatrics (Calcutta, India), 14(12), Dec 1977, 973-977. Engl.

See also entry 5475.

This article concerning the infant growth survey at Agra describes the methodology used and some of the related problems encountered by the field workers. Newborn infants and children aged 1-12 months were selected by door-to-door contact. Obtaining the exact ages of infants from municipal records was not always possible, but the greatest difficulty was in determining the social and economic classes of families. Other problems arose in assessing gestational age and taking anthropometric measurements. Many mothers were reluctant to have their babies weighed. The survey team met with considerable suspicion as they conducted their home visits. (FM)

- 5088** de Glanville, H. ed(s). *Treatment of bilharzia.* AFYA (Nairobi), 12, Jan-Feb 1978, 2-4. Engl.

The epidemiology and treatment of schistosomiasis are reviewed. Drugs commonly used to treat the disease include antimonials, lucanthone, niridazole, hycanthone, oxamniquine, and metrifonate; their chemistry, dosages, and side effects are described. It is pointed out that diagnosis must be certain before treatment can begin and, even then, it is only worthwhile to treat patients who are heavily infected, symptomatic, and not likely to be reinfected; in some cases, a patient may be better off with a light infection that gives him immunity against further infection. Mass treatment has so far been ineffective because of lack of safe water supplies, proper latrines, snail control, and health education, all of which are needed to reinforce chemotherapy. (DP-E)

- 5089** de Ville de Goyet, C., Jeannée, E., Lechat, M.F., Bouckaert, A. *Anthropometric measurements in a relief programme in Niger: a tool for decision making at the community level.* Disasters (Oxford, UK), 1(3), 1977, 223-229. Engl. 15 refs.

A survey of weight:height and arm circumference:height was carried out on a sample of 3 455 children in refugee camps in Niger, during and after the drought of 1974, in order to help administrators make decisions about relief measures. This paper discusses the survey methodology and findings, comparing the usefulness of the two anthropometric measurements and stressing that data collection for decision-making, which is subject to the most stringent of time constraints, cannot be as exhaustive as data collection for scientific research. (HC-L)

- 5090** Devadas, R.P., Easwaran, P.P., Ponnammal, K. *Diet and nutrition in the first year of life; part I: feeding pattern, weaning practices and immunization measures adopted.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 14(11), Nov 1977, 334-340. Engl.

See also entry 5480.

A Coimbatore (India) dietary study of 1 759 low-income children aged less than 1 year indicated that only 7% were artificially fed without any breast-feeding. Supplementary feeding was generally started at age 3 months. Porridge and cow's milk were used by the poorest families and cow's milk, bananas, and commercial infant foods by higher income families. Cereal with ground

legume seeds and rice were other common infant foods. Immunization practices are also described. Statistical data are included. (Modified journal abstract.)

- 5091 Ebrahim, G.J.** *Breast feeding; the biological option.* London, Macmillan, Macmillan Tropical Community Health Manuals, 1978. 86p. Engl. Refs.

In order to encourage breast-feeding and improve the nutritional status of infants in developing countries, the author presents some of the current research findings on the importance of breast milk. The 1st 2 chapters explain the physiological aspects of lactation and suckling. Chapter 3 discusses ways to encourage breast-feeding in maternity wards. Chapter 4 compares the properties of breast milk with those of artificial formulas. Chapter 5 provides the historical context of artificial feeding, emphasizing its newness. In the final chapter, the author outlines some of the nutritional, social, and economic effects of artificial feeding. (FM)

- 5092 Edozien, J.C.** *Malnutrition: setting new priorities.* Professional Nutritionist (San Francisco, Cal.), Spring 1979, 1-4. Engl.

The author examines some of the solutions that have been proposed to the problem of malnutrition in developing countries. One theory is that malnutrition is an inevitable consequence of poverty, which can be improved by economic development. The other is the belief that malnutrition is a man-made disorder due to social inequalities that could be resolved by fair distribution of available resources. Since special feeding programmes are too expensive for developing countries, more attention should be given to encouraging the production of local foods that can be raised and prepared by village women, whose major resource is time. Nutrition education should also be encouraged. An example of a Bolivian project is given. (DP-E)

- 5093 Ehrhardt, J.P.** *Pathologie polynésienne. (Polynesian pathology).* Médecine et Armées (Paris), 3(2), 1975, 107-119. Fren. 56 refs.

The author outlines the epidemiology, diagnostic methods, treatment, and control measures associated with the major health problems of Polynesia. The most common land-related diseases are filariasis, dengue fever, leptospirosis, meningitis, and infections from insect bites. Problems related to the sea include wounds caused by coral, infections from attacks by sharks and stonefish, and food poisoning from eating contaminated fish. (FM)

- 5094 Fain, A.** *Problèmes actuels de la loase. (Loiasis: the present situation).* Bulletin of the World Health Organization (Geneva), 56(2), 1978, 155-167. Engl.

Also published in English and Spanish.

Research during the past 20 years has uncovered several new aspects of loiasis that are presented in this article. Epidemiological information is given and the problem of encephalitis, a frequent complication, is discussed. The most common treatment method is the administration of diethylcarbamazine (DEC), which presents its

own risks; recommended dosages are included. Control measures against the vectors were undertaken in 1967 but proved too costly and difficult to be repeated. The economic implications of the disease are serious, because it attacks men in the prime of life and is particularly prevalent in workers on hevea plantations. (FM)

- 5095 Food Engineering International, Radnor, Pa.** *Nutritional design.* Food Engineering International (Radnor, Pa.), 2(6), Jun 1977, 38-43. Engl.

This paper describes the preparation and gives the nutritional content of: a protein-fortified maize beverage suitable for weaning food, from Nigeria; an instant whole milk powder from Sweden; textured soy proteins from France; a non-cariogenic sugar substitute (Xylitol) and a vitamin-fortified yoghurt from Switzerland; a high-energy liquid food based on soy beans, from Japan; and a food enzyme extracted from pineapples in Taiwan. (HC-L)

- 5096 Freedman, R.D.** *Review of recently-published work dealing with nutrition research in mainland China.* In Bourne, G.H., World Review of Nutrition and Dietetics; Human and Veterinary Nutrition, Biochemical Aspects of Nutrition, No. 30, Basel, Switzerland, S. Karger, 1978, 1-22. Engl. Refs.

This article reviews, in chronological order, the literature on applied nutrition in the People's Republic of China that has been published since the revolution. Research topics include: quantitative analyses of dietary amino acids and vitamins; investigations into determining the normal caloric and vitamin requirements of the average Chinese; surveys of the national nutritional status with a view to determining measures required for improvement; research into the effect of processing, cooking, and storage on the vitamin content of food; nutritional evaluation of infant milk substitutes; studies of nutritional deficiency diseases; etc. (HC-L)

- 5097 Gabaldon, A.** *What can and cannot be achieved with conventional anti-malaria measures.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(4), Jul 1978, 653-658. Engl.

Until now, malaria eradication has been based on interception of the vectors by spraying houses with DDT. With proper strategy and adequate execution, eradication is possible in areas where the vector is responsive to the insecticide, but in other areas conventional measures are costly and not completely effective. In such cases, new ways should be sought to tackle the other primary epidemiological factors: the parasite and the human being. Possibilities presently being investigated include a vaccine and a drug that can eliminate the parasites from man with one or two doses and has a long-lasting protective effect against new infections, the two conditions required for effectiveness in the field. (Modified journal abstract.)

- 5098 Gholkar, S.M.** *Study of the clinical features of hookworm anaemia cases admitted in munici-*

pal hospital. Current Medical Practice (Bombay, India), 20(10), Oct 1976, 462-466. Engl.

This study examines 25 cases of anaemia due to ankylostomiasis that were admitted to a Bombay (India) hospital in 1969; age and sex distribution, symptoms, and clinical features are noted. The epidemiology of hookworm disease is discussed. Preventive measures are stressed, i.e., the extermination of mature worms in patients already stricken to interrupt transmission, the destruction of larvae in the soil, and health education concerning hygiene and water supply. Statistical data are included. (DP-E)

5099 Góngora, J., Shaw, D.J. *World Food Programme assistance for supplementary feeding programmes*. In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 156-167. Engl.

Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

By December 31, 1976, 14 years after it commenced operation, the World Food Programme (WFP) had committed \$675 million, or 24% of total assistance, to projects designed to improve the nutritional status of the most vulnerable groups. These projects were mainly supplementary feeding programmes for mothers and preschool children and primary school feeding programmes; their contribution to improved nutrition is examined. The authors also discuss current WFP priorities, follow-up of the World Food Conference resolution concerning nutrition, and inter-agency cooperation and coordination. (DP-E)

5100 Grab, B. *Rôle du modèle épidémiologique dans la surveillance des maladies transmissibles. (Role of epidemiological models in surveillance of communicable diseases)*. Revue d'Epidémiologie et de Santé Publique (Paris), 25(5-6), 1977, 375-385. Fren.

The use of the computer in providing an accurate representation of disease dynamics and reliable forecasts of the effect of various interventions upon them is discussed with examples. Statistical data are included. (HC-L)

5101 Greaves, J.P. *Feeding programmes at village level*. In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 139-140. Engl.

Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

Three types of nutrition programmes commonly used in villages are supplementary feeding programmes for vulnerable groups using imported foods, demonstration programmes using locally available foods, and emergency programmes. The author briefly discusses the problems of selecting beneficiaries, programme management, community participation, and complementary inputs,

which can include treatment of common ailments, preventive care, provision of potable water and environmental sanitation, health education, and food production. (DP-E)

5102 Howe, G.M. ed(s). *World geography of human diseases*. London, Academic Press, 1977. 621p. Engl. Refs.

Twenty-two authors have contributed expert knowledge to this work whose purpose is to demonstrate the global variability and spatial pattern of a selected range of important diseases. The introduction expands the concept that disease represents maladjustment or a lack of harmony in the environment; part 1 considers those diseases for which the aetiology is largely known (cholera, smallpox, malaria, tuberculosis, etc.) and are hence reducible, while part 2 deals with industrial lung diseases, illnesses associated with drug abuse, deficiency diseases, mental illnesses, cardiovascular diseases, and cancer. Numerous graphs, maps, and tables appear throughout. (HC-L)

5103 International Children's Centre, Paris. Université de Dakar, Institut de Pédiatrie Sociale, Dakar. Institut National de Santé Publique, Abidjan. *Family health and birth control*. Children in the Tropics (Paris), (110), 1977, 2-44. Engl., Fren. Refs.

This issue is devoted to family health and birth control. Chapter 1 discusses the risks, for mother and child, of too-closely-spaced pregnancies and explores some of the economic and social obstacles to planned parenthood. Chapter 2 illustrates the advantages of integrating birth control services with maternal child health clinics and basic health centres. A pilot project in Tanzania showed a greater acceptance and continuation rate of birth control methods when they were discussed during regular clinic visits. Personnel needs and training for birth control programmes are outlined and the various methods of contraception are described. A bibliography of reference works is included. (FM)

5104 International Planned Parenthood Federation, Indian Ocean Region. Colombo Plan Bureau, Colombo. *Communication training workshop*. Colombo, Colombo Plan Bureau, Jul 1973. 50p. Engl. Communication Training Workshop, Colombo, Sri Lanka, Jul 1973.

This report summarizes the proceedings of a conference whose overall goal was to develop means of effective communication in order to disseminate the family planning message through all available media. Three specific workshop objectives were to strengthen and consolidate information and education components of family planning in the Indian Ocean region, exchange views and ideas about on-going communication programmes, and explore the feasibility of integrating family planning communication and motivation with general development strategy. Included in this document are the opening addresses, the agenda, the workshop evaluation form, and a list of participants. (Modified journal abstract.)

- 5105 Jaffe, W.G.** *Selección y aceptabilidad de alimentos. (Selection and acceptability of foods).* Archivos Latinoamericanos de Nutrición (Caracas), 26(4), Dec 1976, 381-400. Span. 35 refs.

This paper examines the physiological, psychological, physical, ecological, sociocultural, economic, and educational factors that affect human selection and acceptability of foods, concluding that careful analysis of local cultural, economic, and ecological conditions is an essential prerequisite to planning an effective nutrition campaign. (HC-L)

- 5106 Jordan, J., Rubén, M., Hernández, J., Bebelagua, A., Tanner, J.M.** 1972 *Cuban national child growth study as an example of population health monitoring: design and methods.* Annals of Human Biology (London), 2(2), Apr 1975, 153-171. Engl. 12 refs.

A 1972-1973 Cuban growth study took 15 anthropometric measurements and assessed the puberty stages and menarche status of a random sample of 50 360 children aged 1-19 years. Information regarding the social and educational status of the parents was obtained and parental heights were measured. Similar measurements were taken 1 year later of 30% of the sample and compared to the original results. Problems of planning and execution of growth surveys designed to set national standards are described and solutions proposed. Statistical data are included. (Modified journal abstract.)

- 5107 Kapur, T.R.** *Present day chemotherapy for leprosy; review article.* Indian Medical Gazette (Bombay, India), 17(3), Jul 1977, 91-99. Engl. 105 refs.

A derivative of Diaminodiphenyl Sulphone, commonly known as Dapsone, is recognized as the best and cheapest leprosy treatment presently available. Dapsone's dosage, toxicity, and side effects are discussed. Since the incidence of Dapsone resistance is high, a number of drugs are used to counteract it; their advantages and disadvantages are examined. (DP-E)

- 5108 Kazyumba, G.L.** *Endémie sommeilleuse en République du Zaïre au cours des 25 dernières années (1952-1976). (Sleeping sickness in the Republic of Zaïre during the past 25 years (1952-1976)).* Médecine d'Afrique Noire (Paris), 26(1), Jan 1979, 47-52. Fren. 37 refs.

The author reviews progress in the control of trypanosomiasis in Zaïre from 1952-1976. Recent increases in diagnosed cases in several areas, which could be due partly to the effectiveness of mobile teams, show that the danger is not over. Diagnostic methods are discussed, including indirect immunofluorescence and hemagglutination. Drug resistance is a serious problem when treating the disease and more research must be done to develop new drugs. The author concludes by outlining the activities of WHO to encourage research in diagnosis techniques, parasitic control, and drugs. (FM)

- 5109 Koopman, J.S., Guzmán, N., Henao, O., Bergonzoli, G.** *Diarrheal disease surveillance system in Cali, Colombia: theoretical basis and methods.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(4), 1978, 323-334. Engl. 30 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 85(4), 1978.

A diarrheal disease surveillance system in Cali (Colombia) seeks to reduce the circulation of fecally-transmitted diarrheal disease agents by identifying conditions of environmental contamination and personal behaviour that spread the causal agents. The system focuses on transmission mechanisms rather than the high-risk infant population. Incidence and exposure data are collected and the resulting disease control effort is backed up by laboratory work directed principally at finding environmental contamination that might not be detected otherwise and at determining how this contamination can be controlled. (Modified journal abstract.)

- 5110 Kouznetsov, R.L.** *Malaria control; benefits of past activities in tropical Africa.* WHO Chronicle (Geneva), 31(3), Mar 1977, 98-101. Engl.

Also published in French, Russian, and Spanish.

The gains resulting from antimalaria activities in tropical Africa during the past 30 years have too often been ignored, probably because the majority of projects and programmes have failed to achieve their main objective, which was the interruption of malaria transmission, and little information on them has been analyzed or published. The ultimate aim of the present revised antimalaria strategy is still eradication but no fixed time limit has been set; the immediate objective of each programme depends on the epidemiological situation, the available resources, and local problems. This paper reviews the benefits of malaria control measures, particularly residual insecticide spraying of houses, in terms of malaria reduction and improvement in health status. (Modified journal abstract.)

- 5111 Lancet, London.** *Infant-food industry.* Lancet (London), 11(8081), 15 Jul 1978, 1240-1241. Engl.

This editorial reaffirms the opinion that the switch from breast-feeding to formula has not been beneficial to infant health in developing countries. Infant food manufacturers have been severely criticized for promoting their products at the expense of breast-feeding and, in their own defense, some of them have banded together to form the Council of Infant Food Industries, a body that seeks to obtain recognition as a self-regulator of the industry. Although not all companies belong to this organization, it is hoped that cooperative efforts will be encouraged. It is pointed out that health professionals also have much to learn about infant and maternal nutrition. (DP-E)

- 5112 Land, T.** *New global strategy for malaria control.* Africa (London), 80, Apr 1978, 58-59. Engl. Recent increases in the incidence of malaria, the greatest killer among parasitic diseases, have been especially

serious in Southeast Asia, Latin America, and Turkey and threaten the agricultural self-help programmes that will fail if a large proportion of the labour force is affected. Some hope is offered by two scientific discoveries in Hawaii and New York that will hopefully lead to the development of an effective anti-malaria vaccine. WHO will be able to incorporate this vaccine into its plan to vaccinate every developing-country child by 1990 and into its renewed global malaria eradication programme. (DP-E)

- 5113 Lowenberg, M.E., Todhunter, E.N., Wilson, E.D., Savage, J.R., Lubawski, J.L.** *Programs to improve nutrition.* In Lowenberg, M.E., Todhunter, E.N., Wilson, E.D., Savage, J.R., Lubawski, J.L., Food and People, New York, Wiley, 1979, 286-360. Engl. Refs.

International, national, and voluntary aid programmes to improve nutrition are examined. International organizations sponsoring nutrition and feeding programmes include FAO (Freedom from Hunger-Action for Development and the World Food Program), UNICEF, WHO, and PAHO. The USA has several public and private agencies for the improvement of nutrition, such as the Agency for International Development and the Food and Rockefeller Foundations, which encourage nutrition research in developing countries. Notable voluntary organizations are the Cooperative for American Relief Everywhere (CARE) and the Salvation Army. The efforts of these organizations have contributed to the discovery and development of new food sources and better crop yields. (RMB)

- 5114 Malingreau, M.C.** *Breastfeeding, postpartum abstinence and fertility; a literature review.* Yogyakarta, Indonesia, Gadjah Mada University, Population Institute, 1978. 45p. Engl. Refs.

The author reviews the literature pertaining to the relationship between breast-feeding, postpartum abstinence, and fertility. Chapter 1 examines historical and contemporary evidence of the birthspacing effect of breast-feeding. Chapter 2 studies the effects of lactation on the various components of the birth interval, concluding that amenorrhea (absence of menstruation) was the component most affected. Final chapters review the relationship between lactation, postpartum sexual taboos, and fertility. The study suggests that changes in breast-feeding patterns in developing countries can affect fertility levels and must be considered in developing family planning programmes. (FM)

- 5115 Maung, T.M.** *Cholera in the Gilberts.* World Health (Geneva), Jan 1979, 609. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish. A cholera epidemic in the Gilbert Islands that lasted from September-December 1977 is described. Control efforts included massive rehydration treatment of those affected, the formation of a cholera surveillance unit, sanitation improvements such as better waste disposal techniques and the cleaning and disinfecting of public toilets, and health education and immunization cam-

paigns. Of 1 102 suspected cases, the cause of 299 was confirmed as *Vibrio cholerae* and there were 21 deaths. The author suggests that health officials in the South Pacific should be more aware of this disease. (DP-E)

- 5116 McDougall, A.C., Rose, P.** *Integrated leprosy control in Guyana.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(1), 1978, 11-16. Engl.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 1978.

After more than a century of leprosarium-based treatment, a successful "find and treat" leprosy control programme using existing outpatient facilities was initiated in Guyana in 1971. Particular attention is now being paid to the yearly incidence of new cases in assessing the continuing effectiveness of this programme. Possible strategies for improvement include better health education, prolonged periods of regular treatment, and extensive examination of schoolchildren and household contacts. If these are not effective, a case is made for conducting a detailed epidemiological study of all new cases since 1971. An annex contains Caribbean government expenditures for 1973 and other statistical data are included. (DP-E)

- 5117 Monnier, J., Rajon, A.M.** *Poliomyelitis.* Children in the Tropics (Paris), (111), 1978, 3-13. Engl.

This article outlines the causes of poliomyelitis, its clinical forms, treatment, and vaccination measures. Most developed countries have compulsory vaccination programmes for children, although adults are still at risk, especially during travel. Lately, there has been an increase in the incidence of poliomyelitis in developing countries, especially tropical areas, and the authors point out that the disease cannot be controlled only by general improvements in environmental health. They urge that all countries undertake mass vaccination campaigns, especially for children aged less than 5 years. (DP-E)

- 5118 Moss, N.H., Mayer, J. ed(s).** New York Academy of Sciences, New York. *Food and nutrition in health and disease.* New York, Annals of the New York Academy of Sciences, Volume 300, 1977. 474p. Engl. Refs.

Conference on Food and Nutrition in Health and Disease, Philadelphia, Pa., 1-3 Dec 1976.

The papers from this conference are organized into seven sections with a general introduction and conclusion. Part 1 examines food production, including the impact of energy resources, land and water constraints, and climatic changes. Part 2 studies food distribution and food policies. Part 3 reviews the role of technology, examining irrigation projects, protein research, and food fortification. Part 4 outlines problems in developing countries such as protein-calorie malnutrition, infant feeding, prenatal nutrition, and vitamin deficiencies. Parts 5 and 7 discuss nutrition in the USA, while part 6 examines some of the effects of nutrition on health and discusses obesity, aging, brain development, cardiovascular disease, and cancer. (FM)

- 5119 Muhammed, A.** *Nutritional improvement of the rural poor in Pakistan; a model for broad-based socio-economic development of the rural poor to affect stable nutritional improvement.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 188-202. Engl.

Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

The University of Agriculture, Lyallpur, Pakistan proposes to undertake a \$3 million, 5-year research-cum-development project in 37 villages with a total population of 123 000. The project's major objectives are to overcome nutritional inadequacies through a socioeconomic development programme aimed at increasing food production and employment opportunities and to develop a nutrition development model for use in all areas of the country. The project's specific objectives, background and justification, and proposed action programme are examined. Statistical data are included. (DP-E)

- 5120 Muller, M.** *Baby killer; a War on Want investigation into the promotion and sale of powdered baby milks in the Third World.* London, War on Want, 1974. 23p. Engl. Refs.

A series of articles examines the nutritional disadvantages of bottle feeding in developing countries, the risks to infant health from improperly prepared formula fed to them in inadequately sterilized bottles, and the unethical practices used by large corporations to promote and distribute their products. To combat these problems, the War on Want presents recommendations that should be adopted by the industry, developing country governments, the British government, the medical profession, and other channels. An appendix included in this edition discusses some of the reactions, especially of the large companies, to the original publication. (RMB)

- 5121 Nadeem, A.A., Younis, Y.O.** *Physical illness and psychiatric disorders in Tigani el-Mahi psychiatric hospital (Sudan).* East African Medical Journal (Nairobi), 54(4), Apr 1977, 207-210. Engl.

From August 1973-March 1975, 45 patients suffering from mental illness associated with physical disease were admitted to Tigani el-Mahl psychiatric hospital, Sudan. The medical records of 39 of them were analyzed for age, sex, psychiatric manifestation, associated physical illness, psychiatric history, etc. The most common psychiatric condition was found to be excitement and the most common associated physical illness, malaria. It is suggested that, where infectious diseases are prevalent, the possibility of organic illness be considered in the diagnosis of any functional psychosis. (HC-L)

- 5122 Nadim, A., Navid-Hamidid, A., Javadian, E., Tahvildari Bidruni, G., Amini, H.** *Present status of kala-azar in Iran.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(11), 1978, 25-28. Engl. 9 refs.

About 120 cases of visceral leishmaniasis have been reported in Iran up to the present time, mostly from the mountainous areas of the southwest; 76% of the patients have been children aged less than 10 years. Postmortem examinations of wild carnivores have shown that probable reservoirs of infection are jackals and foxes and that sandflies are the probable vectors. Statistical data are included. (Modified journal abstract.)

- 5123 Nature, London.** *Review articles: parasitology supplement.* Nature (London), 273, 22 Jun 1978, 595-630. Engl. Refs.

This special collection of review articles on parasitic diseases covers: the epidemiology and ecology of leishmaniasis in Latin America; identification of economically important parasites; current problems in the control of mosquitoes; principles of the eradication or control of tsetse flies; the pathology, pathobiology, and pathogenesis of schistosomiasis; antigenic variation in trypanosomes; immunity to intestinal parasites; cultivation of malarial parasites; specific and nonspecific immunization against parasitic infections; and chemotherapy of parasitic infections. (DP-E)

- 5124 Nigam, P., Kumar, A., Sriwastava, R.N., Siddiqui, M.I.** *Recrudescence of malaria: detection of malaria positive cases from fever cases attending primary health centre, Chirgoan, district Jhansi, U.P. Clinician (Goa, India), 41(6), Jun 1977, 216-220. Engl. 8 refs.*

Fifth Annual Conference on Communicable Diseases, Jhansi, India, Feb 1976.

Regardless of clinical diagnosis, every fever case attending the primary health centre at Chirgoan Jhansi (India) from January 1973-December 1975 was subjected to a blood examination for malaria parasites. Of the 1 268 cases found, many were not diagnosed as malaria, indicating that the disease can coexist with other conditions such as enteric disorders, respiratory infections, etc., often characterized by fever. The importance of passive surveillance in such cases is emphasized. Statistical data are included. (DP-E)

- 5125 Noordin, R.A.** *Integrated food and nutrition programme at village level-the Malaysian experience.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 47-60. Engl.

Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

Malaysia's applied nutrition programme, begun in 1977 in the Kuala Langat district of Selangor, concentrates on community education and organization, youth activities, school activities, and women's activities. The background, organization, and effects of the programme are examined. The programme was gradually expanded to other districts and was included in the applied food and nutrition programme in the Third Malaysian Plan (1976-1980). It is concluded that a successful national nutrition programme is possible with full government

commitment, a strong coordinating mechanism at all levels, adequate orientation and training, and complete community involvement. Statistical data are included. (DP-E)

- 5126 Olatawura, M.O.** *Effects of psychotropic drugs in different populations.* Bulletin of the World Health Organization (Geneva), 56(4), 1978, 519-523. Engl.

Also published in French and Spanish.

Although psychotropic drugs are known to be effective in all populations, the known differences in terms of health and disease in different parts of the world have not been related to the effectiveness of such drugs. Nutritional, metabolic, genetic, cultural, and environmental factors that could be important in this respect are discussed. The benefits that could accrue from a knowledge of proper drug dosage, i.e., fewer side effects and reduction in cost, particularly in developing countries, are highlighted. (Modified journal abstract.)

- 5127 Organización Panamericana de la Salud, División de Servicios de Apoyo, Oficina de Estadísticas de Salud, Washington, D.C.** *Hechos y cifras sobre salud en las Américas: síntesis de las tendencias principales. (Facts and statistics on health in the Americas: synthesis of the main trends).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 84(1), Jan 1978, 65-79. Span.

This document summarizes health trends in Latin America over the past 20 years according to these indicators: birthrate, life expectancy, child mortality, mortality by selected infectious diseases (polio, measles, whooping cough, tuberculosis, and enteric and diarrhoeal diseases), morbidity from the same diseases, malnutrition, health manpower resources, hospital services, and water supply. Nineteen graphs are included. (HC-L)

- 5128 Orr, E.** *Contribution of new food mixtures to the relief of malnutrition; a second look.* Food and Nutrition (Rome), 3(2), 1977, 2-10. Engl.

Also published in French and Spanish.

This paper reviews the position on weaning foods that have been developed since the 1950s in the tropical countries. Currently, only about six products have survived in a commercial sense and some are distributed partly through government welfare programmes. There is a trend away from imported ingredients such as soya and milk powder and towards formulas based on local foods. Although the groups that would benefit the most are likely to be too poor to purchase such products, weaning foods can be useful in government-subsidized nutrition programmes. (Modified journal abstract.)

- 5129 Padmavati, S.** *Rheumatic fever and rheumatic heart disease in developing countries.* Bulletin of the World Health Organization (Geneva), 56(4), 1978, 543-550. Engl.

Also published in French and Spanish.

Studies on the prevalence and other epidemiological features of rheumatic fever and rheumatic heart diseases and pilot prophylactic programmes have been carried

out in India for the past 12 years. The results of these, together with data from other developing countries, have been taken into account in discussing the problems of these diseases in the developing world. Historical data, prevalence in India and other countries, and distribution according to age, sex, and socioeconomic factors are examined. Suggestions for the control of these diseases, to be modified according to local conditions, are made. (Modified journal abstract.)

- 5130 Palocaren, A.** *Health promotion through co-operative cottage industries.* Antigonish, N.S., St. Francis Xavier University, Coady International Institute, Nov 1978. 47p. Engl.

Independent study submitted to St. Francis Xavier University, Antigonish, N.S., in partial fulfilment of the Diploma Course in Social Development.

Because of the lack of organization and conflict of interest among a variety of area health services, the Christian Medical College (Vellore, India) has attempted to encourage local participation in a community health programme by involving the villagers in community development activities, mainly cottage industries. The author discusses the demographic and cultural background of the area, the College's health extension programme, the idea of using handicrafts and cottage industries, traditional practitioners, the potentials and limitations of community development, educational programmes to precede development, development projects, and a health insurance scheme. (DP-E)

- 5131 Pereira, M., Assaad, F.A., Delon, P.J.** *Influenza surveillance.* Bulletin of the World Health Organization (Geneva), 56(2), 1978, 193-203. Engl.

Also published in French and Spanish.

The main objectives of influenza surveillance are to measure the impact of the disease by collection and analysis of epidemiological information on morbidity and mortality and to anticipate future epidemics by collecting and analyzing influenza viruses. WHO's influenza programme is based on the collaboration of 98 centres in 70 countries and two WHO centres in London and Atlanta (Georgia, USA). Both methods of surveillance are discussed. When a new variant appears, the degree of protection afforded by the available vaccine is assessed. WHO publishes annually in the *Weekly Epidemiological Record* recommendations on vaccine composition. (Modified journal abstract.)

- 5132 Pervikov, J., Fofana, Y., Koldoba, L.G., Diallo, D.** *Aspects épidémiologiques de la poliomyélite au Mali. (Epidemiological aspects of poliomyelitis in Mali).* Médecine Tropicale (Marseilles, France), 38(1), Jan-Feb 1978, 99-103. Fren.

From 1968-1975, 1 800 cases of poliomyelitis were observed in Mali. The incidence was especially high among male children aged 6 months-2 years. Morbidity was greatest during the dry season and the hot season. The authors stress the need for oral immunization of infants aged 3-4 months. Statistical data are included. (Modified journal abstract.)

- 5133 Petana, W.B.** *American trypanosomiasis (Chagas' disease) in the Caribbean.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(1), 1978, 45-50. Engl. 10 refs.
Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 1978.

Trypanosomiasis is an important public health problem in many parts of Central and South America and is endemic in nearly all the countries facing the Caribbean. Though the infection may cause severe disability and death, many cases are asymptomatic. In places where human infection is scarce, the insect vectors may be passing the parasite among wild animals, maintaining a sylvatic transmission cycle. The epidemiology of the disease in Aruba, Curaçao, Trinidad, Jamaica, and Belize is discussed. (DP-E)

- 5134 Power, J., Heese, H. de V.** *Role of community paediatrics in South Africa.* South African Medical Journal (Capetown), 53(11), 18 Mar 1978, 408-410. Engl. 14 refs.

The main concern of community pediatrics in South Africa is to identify and remove the factors that retard the full developmental potential of children. Pediatricians familiar with the orientation and methods of community medicine are best suited to this task, which involves: cooperating with all health, education, and welfare authorities concerned with child care; taking part in the education of all child care professionals; planning and organizing child care services; and providing clinical care, particularly at primary care and rehabilitative levels. (Modified journal abstract.)

- 5135 Prost, A., Nebout, M., Rougemont, A.** *Lepromatous leprosy and onchocerciasis.* British Medical Journal (London), 1(6163), 3 Mar 1979, 589-590. Engl.

The prevalence of leprosy in districts with and without a high prevalence of severe onchocerciasis in Upper Volta is studied. The results indicate that in the two populations, in which the overall prevalence of leprosy is similar, the prevalence of lepromatous leprosy is approximately twice as high in the areas where onchocerciasis is hyperendemic. These findings confirm observations of reduced immunity to leprosy, especially the lepromatous type, because of onchocerciasis. Statistical data are included. (DP-E)

- 5136 Rogers, E.** *East-West Communication Institute, Summer Program of Advanced Study on Communication and Development, Honolulu. Communication for development in China and India: the case of health and family planning at the village level.* Honolulu, Hawaii, East-West Communication Institute, Jul 1974. 25p. Engl.

This paper explores how communication at the village level was used to attain the development goals of decreased population growth rates and improved health in India and the People's Republic of China. The historical backgrounds of family planning policy in the two countries are compared. The barefoot doctors of China represent the merger of traditional and modern medicine that

is considered crucial to the success of family planning activities in developing countries. Motivation pressures for lower fertility are discussed; these include the incentive systems, the role of mass media, the use of interpersonal channels, and beyond-family planning policies. (Modified journal abstract.)

- 5137 Rosselot Vicuna, J.** *Health of adolescents and young people in Latin America and the Caribbean.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(1), 1979, 7-20. Engl. 38 refs.

Condensed view of *Salud del adolescente y del joven en América Latina y el Caribe* published in *Boletín de la Oficina Sanitaria Panamericana*, 83(4), 1977, 295-308.

This article reviews the current health conditions of adolescents in Latin America and the Caribbean and proposes a general approach to providing health services for their particular biological and psychosocial needs and educational and occupational problems. The major causes of mortality in this age group are traffic accidents, suicide and homicide, and complications of pregnancy, childbirth, and the puerperium; most morbidity is due to accidents, venereal diseases, alcoholism, and mental and psychosocial disorders. Health services for adolescents should be integrated with educational, social, vocational, and legal services. International programmes of this type are examined. (DP-E)

- 5138 Sai, F.T.** *International Planned Parenthood Federation, London. Defining family health needs, standards of care and priorities; with particular reference to family planning.* London, International Planned Parenthood Federation, Occasional Essay No. 4, May 1977. 32p. Engl. 11 refs.

This essay discusses family health needs in the developing world as determined by demography, mortality and morbidity, nutritional status, community concerns, and family interests; describes the appropriate health services as comprehensive, multidisciplinary, and continuous; identifies health care priorities such as data collection, planning and programming units, development and testing of indices, and pilot health projects; examines the implications of uncontrolled fertility for the health of mother and child; and specifies family planning aims. (HC-L)

- 5139 Schieffelin Nordberg, O., Atkinson, L.E.** *Program for the Introduction and Adaptation of Contraceptive Technology, Seattle, Wash. Evaluation of the safety of modern contraceptives in developing countries.* Seattle, Wash., Program for the Introduction and Adaptation of Contraceptive Technology, PIACT Paper No. 2, Jan 1979. 15p. Engl. 18 refs.

The consequences of using a particular medication can vary according to the population using it. This issue is examined in relation to the use of Western contraceptive technology in the developing world. Given the diversity of cultures and the different dietary and health condi-

tions of contraceptive users in developing countries, information must be collected on the long-term safety aspects of contraceptives in the environments in which they are used; the current efforts and problems encountered in obtaining this information and the requirements for examining safety issues are also considered. A list of current contraceptive studies in the developing world is included. (RMB)

- 5140 Simpson, D.I.** *Viral haemorrhagic fevers of man.* Bulletin of the World Health Organization (Geneva), 56(6), 1978, 819-832. Engl.

Also published in French and Spanish.

This article reviews the current knowledge on the viral haemorrhagic fevers that infect man, namely smallpox, chickungunya fever, dengue fever, Rift Valley fever, yellow fever, Crimean haemorrhagic fever, Kyasanur Forest disease, Omsk haemorrhagic fever, Argentinian haemorrhagic fever (Junin virus), Bolivian haemorrhagic fever (Machupo virus), Lassa fever, haemorrhagic fever with renal syndrome, and Marbury and Ebola virus diseases. Epidemiology, diagnosis, symptoms, means of transmission, etc., are discussed. (Modified journal abstract.)

- 5141 Soejarto, D.D., Bingel, A.S., Slaytor, M., Farnsworth, N.R.** *Fertility regulating agents from plants.* Bulletin of the World Health Organization (Geneva), 56(3), 1978, 343-352. Engl.

Also published in French and Spanish.

A WHO research programme has been established to investigate and develop fertility regulating agents from plants for use in humans. The shortcomings of available data sources are pointed out and possible reasons for the lack of success so far are discussed. The information available on 3 000 plants has been computerized and, using a weighting system, the species for which sufficient data are available have been listed in order of priority for further research. The implementation of the experimental phases of the programme is outlined. (Modified journal abstract.)

- 5142 Tan, S.B., Lee, J., Ratnam, S.S.** *Effects of social disincentive policies on fertility behavior in Singapore.* American Journal of Public Health (New York), 68(2), Feb 1978, 119-124. Engl.

Five social disincentive policies were implemented in Singapore in 1973 to augment the government's fertility reduction programme. The policies involved increasing delivery charges in government hospitals, school admission priority for children, maternity leave, priority in allocation of government housing, and income tax relief. A 2-year study of 1 010 married women who had had abortions and 943 married women who had decided to complete their pregnancies indicated that the 1st two policies were the most likely to influence their decisions about present and future pregnancies (most of the women did not know about the income tax policy). Statistical data are included. (Modified journal abstract.)

- 5143 Teller, C.H., Beghin, I., del Canto, J.** *Population and nutrition planning: the usefulness of demographic discipline for nutrition policy in Latin America.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(1), 1979, 21-32. Engl. 39 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 1979.

Demography can make an important contribution to nutrition planning by helping to provide a diagnostic framework, analytical indicators and indices, and definition of target groups' nature, size, and distribution. It is often more useful than other types of data because of its nature and its availability, much of it having been collected for other reasons. Three Central American projects that have provided good examples of the potential value of demography in nutrition planning are examined. In particular, interest expressed in a demographic sourcebook of indicators and indices demonstrated a felt need to improve national planning capacity with local demographic data. (Modified journal abstract.)

- 5144 Thylefors, B.** *Ocular onchocerciasis.* Bulletin of the World Health Organization (Geneva), 56(1), 1978, 63-73. Engl. Refs.

Also published in French and Spanish.

The authors examine the causes and treatment of onchocerciasis, the leading cause of blindness in parts of Africa and Latin America. Epidemiological information is given, along with a description of the ocular manifestation of the disease. Community and individual risk factors are taken into account in pointing out the importance of early diagnosis and screening of high-risk patients. The two most common chemotherapeutic agents used in treatment are suramin and diethylcarbamazine citrate. However, serious adverse reactions to these drugs limit their effectiveness. Long-term methods of preventing the disease by using pesticides to control transmission and by relocating settlements to reduce human exposure are also explored. (FM)

- 5145 Tyrrell, D.A.** *Some health hazards associated with agricultural improvements.* In Technologies for Rural Health, London, Royal Society, 1977, 33-35. Engl.

Royal Society Discussion of Technologies for Rural Health, London, UK, 9-10 Dec 1976.

For complete document see entry 5225.

The major health risks that may occur as a result of agricultural improvements are increased oral-faecal disease transmission, more breeding places for arthropods and snails, and the opening up of new lands that may contain pests to which the workers have no natural or acquired immunity. The use of animal and human wastes as fertilizer can cause the 1st problem, while irrigation contributes to both. Any new irrigation scheme should include appropriate disease and pest control measures. (DP-E)

- 5146 UNESCO, New York.** *Young child: approaches to action in developing countries; a draft report and recommendations by the Executive Director.*

New York, UNESCO, 27 Mar 1974. 68p. Engl. Refs.

Unpublished document.

This preliminary report examines the basic elements to be considered in establishing policies and expanding programmes in developing countries to meet the needs of young children. Chapter 1 outlines the special physical and psychological needs of children aged less than 6 years. Chapter 2 reviews general approaches to policy planning, including the division of responsibilities at national and local levels. Chapter 3 explores the potential to improve services in such areas as water supply, nutrition, maternity care, immunization, literacy, home improvements to reduce women's workload, and specific services such as day care. The final chapter evaluates UNICEF assistance programmes and recommends increased support for literacy campaigns and projects to improve living conditions. (FM)

- 5147 Uppsala Journal of Medical Sciences, Uppsala, Sweden. Mother/child dyad; nutritional aspects.** Uppsala Journal of Medical Sciences (Stockholm, Sweden), 82(3), 1977, 221-230. Engl. /Maternal Symposium on Nutritional Aspects of the Mother/Child Dyad, Uppsala, Sweden, 20-22 Jan 1977.

This collection of abstracts of lectures given at a Swedish symposium covers: the physiology of pregnancy and lactation; nutritional needs of the pregnant and lactating mother, the fetus, and the young child; antenatal bacterial infection; cultural traditions and nutrition taboos; quantity and composition of breast milk in malnourished mothers; patterns of breast-feeding and weaning; impact of fertility regulation on the health of mother and child; causes and consequences of early weaning; overfeeding during infancy; the responsibility of the infant food industry; nutrition programmes as part of integrated health services; and socioeconomic planning and legislation affecting nutrition. (DP-E)

- 5148 Verin, P. Cause de cécité en Afrique. (Cause of blindness in Africa).** Médecine d'Afrique Noire (Paris), 26(1), Jan 1979, 23-26. Fren.

Causes of blindness in Africa belong to four categories: infections, malnutrition, glaucoma, and parasitic diseases. The most serious infections causing blindness, gonorrhea and measles, would be relatively easy to prevent with systematic control methods and concerted health education campaigns. Trachoma is a highly contagious disease and mass campaigns are needed to check its spread throughout Africa. Malnutrition and poor dietary habits aggravate ocular diseases and are leading causes of premature cataracts. The author also discusses glaucoma and parasitic diseases such as onchocerciasis. (FM)

- 5149 Wakeham, P.F. Severe measles in Afghanistan.** Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 24(2), Apr 1978, 87-88. Engl.

This study of a 1971 measles epidemic in the Hazarajat region of Afghanistan revealed high morbidity and mortality (18%) aggravated by malnutrition and local prac-

tices such as withholding food and fluids from feverish children. Morbidity and mortality are examined by age group. The author concludes that the simplest and most economical measure to reduce measles morbidity and mortality would be measles vaccination, although it is impossible to implement a vaccination programme at this time. (DP-E)

- 5150 Waterlow, J.C. Observations on the protein and energy requirements of pre-school children.** Indian Journal of Nutrition and Dietetics (Coimbatore, India), 16(5), May 1979, 175-188. Engl. 37 refs.

The author discusses the nutritional requirements of preschool children in India with special emphasis on those infants in the 1st month of life. Topics covered include variability, limiting factors for protein and energy, requirements for catch-up growth, and long-term effects. Suggestions for further research are made and there are eight tables of data. (DP-E)

- 5151 Watson, W.B. ed(s). Family planning in the developing world; a review of programs.** New York, Population Council, Population Council Fact Book, 1977. 77p. Engl.

Family planning programmes and national family planning policies in East and Southeast Asia, South Asia, Latin America and the Caribbean, West Asia and North Africa, and sub-Saharan Africa are reviewed. Information on these programmes covers such aspects as vital rates, legislation, new projects, funding, research and evaluation, etc. The book is introduced by a historical overview of family planning services. (RMB)

- 5152 White, K.L., Henderson, M.M. ed(s). Epidemiology as a fundamental science; its uses in health services planning, administration, and evaluation.** New York, Oxford University Press, 1976. 235p. Engl. Refs.

This collection of papers seeks to illustrate some of the potential contributions of quantitative approaches to the problems of allocating finite resources to improve public health. These quantitative approaches are embodied in the concepts, principles, and methods of epidemiology, health statistics, demography, and sociology. The papers stress the use of these concepts in health services planning, administration, and evaluation; the need for more trained epidemiologists and statisticians is also emphasized. Experiences of health planners in the USA, the UK, Canada, Scandinavia, and Australia are cited as practical examples. (DP-E)

- 5153 WHO, Copenhagen. Role of nutrition in public health; report on a working group.** Copenhagen, WHO, 1977. 31p. Engl. 14 refs.

Working Group on the Role of Nutrition in Public Health, Algiers, Algeria, 26-30 Oct 1976.

Also published in French and Russian.

This working group sponsored by WHO's European Office focused on these topics: prevention of protein-energy malnutrition and mineral and vitamin deficiencies, prevention of conditions associated with overnutri-

tion, collective feeding and industrially produced food, quality control (food adulteration and contamination), nutrition education, and control of advertising for baby foods. Items of particular concern to the region's developing countries were the effects of nutritional status on maternal and child mortality, the importance of breast-feeding in nutrition education, and the need to curb advertising of infant foods. Legislation governing the marketing of infant foods in Sweden is appended. (HC-L)

- 5154 WHO, Geneva.** *Safe use of pesticides: third report of the WHO Expert Committee on Vector Biology and Control.* Geneva, WHO, WHO Technical Report Series No. 634, 1979. 44p. Engl. 19 refs.

Meeting of the WHO Expert Committee on Vector Biology and Control, Geneva, Switzerland, 3-9 Oct 1978.

Also published in French, Russian, and Spanish.

Recent studies of the toxicity of pesticides used for vector control are discussed under these headings: needs of developing countries regarding safe use of pesticides, factors influencing the toxicity of pesticides, review of new data on pesticides for public health use, precautionary measures and the monitoring of exposure, and other aspects of the safe use of pesticides, including education and training. Recommendations for national authorities, WHO, and future research are listed in the final chapter. (HC-L)

- 5155 WHO, Geneva.** *Ebola haemorrhagic fever in Sudan, 1976; report of a WHO/international study team.* Bulletin of the World Health Organization (Geneva), 56(2), 1978, 247-270. Engl. 22 refs.

Also published in French and Spanish.

An outbreak of 284 cases of haemorrhagic fever, subsequently named Ebola haemorrhagic fever, occurred in southern Sudan from June-November 1976. In this outbreak, the fever proved to be a unique clinical disease with 53% mortality and a prolonged recovery period; after an initial influenza-like phase, common symptoms included diarrhea, vomiting, chest pain, throat pain, and rash. Laboratory efforts to locate both the virus strain and antibodies to it are described. Statistical data and laboratory photographs are included. (Modified journal abstract.)

- 5156 WHO, Geneva.** *Ebola haemorrhagic fever in Zaire, 1976; report of an international commission.* Bulletin of the World Health Organization (Geneva), 56(2), 1978, 271-293. Engl.

Also published in French and Spanish.

From 1 September-24 October 1976, 318 cases of acute viral haemorrhagic fever occurred in northern Zaire; 280 of the victims died. The initial cases were stricken after receiving chloroquine injections for malaria at the same hospital and it was eventually assumed that, since the disease was previously unknown in the area, an infected patient from a disease focus has contaminated some of the hospital equipment. The symptoms of the disease and

measures taken to treat and control it are described. Statistical data are included. (Modified journal abstract.)

- 5157 WHO, Geneva.** *Epidemiology and control of schistosomiasis: present situation and priorities for further research.* Bulletin of the World Health Organization (Geneva), 56(3), 1978, 361-369. Engl.

Also published in French and Spanish.

This article highlights specific aspects of the epidemiology of schistosomiasis where insufficient data are available on which to base appropriate control strategies. Suggested areas for research include immunological techniques, acquired resistance, the relationship between the clinical and pathological manifestations of the disease, variations in transmission patterns, trials of chemotherapeutic agents, the effects of chemotherapy on immunopathology and on immunity to infection, the cost-effectiveness of different types of snail control, etc. (Modified journal abstract.)

- 5158 WHO, Geneva.** *Epidemiology, etiology, and prevention of periodontal diseases; report of a WHO scientific group.* Geneva, WHO, WHO Technical Report Series No. 621, 1978. 60p. Engl. Meeting of the WHO Scientific Group on Epidemiology, Etiology, and Prevention of Periodontal Diseases, Moscow, USSR, 23 Nov-2 Dec 1977.

Also published in French, Russian, and Spanish.

This 1977 WHO meeting was held to review recent research and progress in the control and prevention of periodontal diseases and make recommendations concerning future efforts. This document covers the epidemiology and etiology of periodontal diseases, prevention and public health assessment of periodontal status and treatment needs, and recommendations for research. Annexes contain a glossary of current terminology, guidelines for a community-based dental programme recommended in the USSR, and examples of guidelines to be used in implementing an education programme for improving oral health. (RMB)

- 5159 WHO, Geneva.** *Surveillance for the prevention and control of health hazards due to antibiotic-resistant enterobacteria; report of a WHO meeting.* Geneva, WHO, WHO Technical Report Series No. 624, 1978. 54p. Engl. Refs.

WHO Meeting on Surveillance for the Prevention and Control of Health Hazards due to Antibiotic-resistant Enterobacteria, Geneva, Switzerland, 18-24 Oct 1977.

This report summarizes the problems of antibiotic resistance among enteric diseases and the spread of resistant organisms. Means of controlling resistance in enterobacteria are reviewed and surveillance methods recommended. Laboratory methods are examined, including means of determining bacteria susceptibility, identification of resistant plasmids, and the sampling of sewage and surface waters. Collecting and processing of data are also covered. The report concludes by describing the organization of an effective control programme and rec-

ommending the development of national and international policies for antibiotic use. (FM)

- 5160 WHO, Geneva.** *Epidémiologie de la schistosomiase et lutte contre cette maladie: situation actuelle et priorités en matière de recherche.* (*Epidemiology of schistosomiasis and the fight against the disease: the current situation and research priorities*). Bulletin of the World Health Organization (Geneva), 56(6), 1978, 859-868. Fren.

Also published in English and Spanish.

Several epidemiological aspects of schistosomiasis must be studied in greater detail before appropriate preventive measures can be taken. Techniques for studying the life cycle of the parasite, human ecology, immunity to the disease, clinical manifestations, biological aspects, and disease transmission must be refined and research encouraged. Chemotherapy will continue to be the dominant method of controlling the disease, but its effectiveness will depend on local conditions. Ecological control through water supply and treatment systems and the biological control of parasites and mollusks are also discussed. In evaluating the usefulness of any such method, cost-benefit analysis must be taken into account. (FM)

- 5161 WHO, Geneva.** *Recent advances in rheumatic fever control and future prospects: a WHO memorandum.* Bulletin of the World Health Organization (Geneva), 56(6), 1978, 887-912. Engl. 203 refs.

Also published in French and Spanish.

Rheumatic fever is the commonest form of heart disease in many developing countries. The public health importance of rheumatic fever is not directly related to its prevalence but is a complex function of many factors, such as incidence, prevalence, mortality, disability, and cost to the community. Recent advances in diagnostic methods are reviewed, together with differences in the epidemiology related to the different sites of infection and the problem of carriership. Methods of prevention and treatment, control of the disease in the community, and strategies for national control are also discussed. (Modified journal abstract.)

- 5162 WHO, Geneva.** *Leprosy control; review of technical cooperation and the available funds.* WHO Chronicle (Geneva), 31(12), Dec 1977, 506-511. Engl.

Also published in French, Russian, and Spanish.

In 1970, there were close to 3 million registered leprosy patients worldwide, but a conservative estimate of the total number of cases was over 10 million (6.5 million in Asia, 3.5 million in Africa, and 350 000 in the Americas). From 1976-1977, WHO questionnaires were distributed and the results, when available, will give an up-to-date appraisal of the situation. This article describes WHO's efforts in technical cooperation to control leprosy and the resources available for carrying out this work. The contributions of the International Leprosy Association and the International Federation of Anti-Leprosy Associations are also discussed. (Modified journal abstract.)

- 5163 WHO, Geneva.** *Nutritional anaemias; report of a WHO group of experts.* Geneva, WHO, WHO Technical Report Series No. 503, 1972. 29p. Engl. 80 refs.

Meeting of the WHO Group of Experts on Nutritional Anaemias, Geneva, Switzerland, 11-15 Oct 1971.

Also published in French, Russian, and Spanish. This study of recent research in anaemia reviews: the methodology of diagnosis, including standard laboratory procedures for measuring haemoglobin and packed cell volume, serum iron, transferrin, erythrocyte protoporphyrin, and folate and vitamin B12 in addition to standardization of survey methods; prevalence studies of iron deficiency and folate and vitamin B12 deficiency; the occurrence and absorption of haemopoietic nutrients, mainly iron, folate, and vitamin B12; recommended intakes of these nutrients; iron and folate supplementation in pregnancy; and evaluation of fortification programmes. Recommendations are included and annexes contain a glossary and indices suggestive of anaemia and nutritional deficiencies. (RMB)

- 5164 Wolman, A.** *Environmental sanitation in urban and rural areas: its importance in the control of enteric infections.* Bulletin of the Pan American Health Organization (Washington, D.C.), 9(2), 1975, 157-159. Engl.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 78(4), Apr 1975, 343-345.

In Central and South America, enteric infections caused by fecal contamination constitute one of the leading causes of death. This paper urges health officials to take the lead in promoting water supply and sewerage systems, hygienic food preparation and handling, and public comprehension of basic preventive measures. (HC-L)

III Health Care Implementation

III.1 Inpatient Care

See also: 5313, 5485, 5593.

- 5165 Ajao, O.G.** *Surgical wound infection: a comparison between dressed and undressed wounds.* Journal of Tropical Medicine and Hygiene (London), 80(9), Sep 1977, 192-195. Engl. 10 refs.

A comparative study of two groups of 50 surgical patients at the University College Hospital, Ibadan (Nigeria), one of whom received conventional sterile dressings and treatment for their surgical wounds while the wounds of the 2nd group were left undressed and untreated for 24-36 hours, showed that the conventional treatment did not cut down the rate of infection and is probably unnecessary. This may be due to early formation of fibrin at the wound site, which provides a barrier against bacteria. Typhoid perforation of the terminal ileum gave rise to infection in all cases in both groups. Statistical data are included. (DP-E)

- 5166 Bagree, M.M., Wanchoo, P.K., Mathur, A.K., Goyal, R.K.** *Management of major burns; a study of 60 cases.* Current Medical Practice (Bombay, India), 20(10), Oct 1976, 433-436. Engl.

This paper reviews the mortality and morbidity due to burns among patients admitted to an Indian medical college hospital without a separate burn unit. Sixty case histories of patients with major burns are classified according to age, sex, percentage of burns, period of hospitalization, duration of intravenous fluid therapy, need for skin grafting, and mortality. General treatment, including pain relief and treatment of shock and anoxia, is discussed. Local treatment involved control of infection, promotion of healing, and skin grafting. Statistical data are included. (DP-E)

- 5167 Bewes, P.C.** *Fractures of the femur in a tropical context: a re-evaluation of Perkins' traction.* Tropical Doctor (London), 4(2), Apr 1974, 64-68. Engl.

This article describes a method for treating fractures of the femur (Perkin's traction) that requires a minimum of equipment, a modicum of experience, and a fair amount of enthusiastic persistence on the part of the physician. The programme of treatment is outlined and both necessary and desirable apparatus listed. Of 15 patients treated entirely by Perkin's traction, all went to full clinical union within 12 weeks from the date of fracture and all had at discharge a range of movement of the joint of at least 75%. Both the advantages and disadvantages of the procedure are discussed. (DP-E)

- 5168 Black, D.P., Gick, S.** *Management of obstetric complications at a small rural hospital.* Canadian Medical Association Journal (Ottawa), 120(1), 6 Jan 1979, 32-34, 37. Engl. 9 refs.

To determine if there is a way of identifying obstetrics patients in whom complications will develop, the experience of a small Newfoundland (Canada) hospital was reviewed. It was found that there was no satisfactory method presently available that allows a hospital to select such patients so that they can be referred to a larger centre. Also, hospitals in which there are fewer than 100 annual deliveries probably do not have a sufficient caseload to maintain the ability to do Caesarean sections; it is therefore suggested that they discontinue obstetric practice. (Modified journal abstract.)

- 5169 Brasil, Ministério da Saúde.** *Hospital geral de pequeno e médio portes, equipamento e material. (General hospital of small and medium size, equipment and materials).* Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Organização de Serviços de Saúde, 1979. 90p. Portuguese.

Lists of necessary equipment for various units of small and medium-sized Brazilian hospitals are presented. These units include: administrative services such as medical records and an outpatients section; diagnostic and treatment services, i.e., physiotherapy, pathology, surgery, radiology, etc.; general and specialized wards such as intensive care, pediatrics, maternity, emergency, psychiatric, etc.; and general services comprising a kitchen, laundry, stores, locker rooms, and maintenance office. The dimensions of the space required for each element of these units are also given. (RMB)

- 5170 Brasil, Ministério da Saúde.** *Normas e padrões de construções e instalações de serviços de saúde. (Norms and standards for health services buildings and facilities).* Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Organização de Serviços de Saúde, 1979. 88p. Portuguese.

After a list of the laws and government directives that affect the construction of health care facilities in Brazil, related concepts and terms are explained in a glossary. Various sections deal with the construction of small and medium-sized hospitals, covering such aspects as site, circulation, patient accommodations, specialized wards, plumbing and electrical systems, kitchen and laundry facilities, general and specialized services, construction materials, security systems, waste disposal, etc. Minimal guidelines are also presented for constructing health

posts and health centres. Statistical data are included. (RMB)

- 5171 Chaudhry, M.R.** *First experience of a rehabilitation centre for schizophrenics in a developing country.* Comparative Medicine East and West (New York), 6(2), Summer 1978, 103-108. Engl. Fountain House, Lahore (Pakistan), which is modeled on the original New York Fountain House, has established an innovative programme to rehabilitate the mentally ill and reintegrate them into the community. The House consists of a clerical unit, a workshop, a snack bar, a kitchen, and a maintenance unit, all staffed by patients; sharing these responsibilities is part of their rehabilitation. Other services include psychological treatment, family counselling, job placement, stalls at festivals, and an extensive follow-up programme. The author feels that Fountain House provides an excellent model of mental health services for developing countries. (DP-E)

- 5172 Chaudhry, M.R., Mirza, L.** *Rehabilitation of schizophrenics in a developing country (five years of Fountain House, Lahore, Pakistan).* Mental Health and Society (Basel, Switzerland), 4(5-6), 1977, 301-307. Engl.

In Lahore, Pakistan, a voluntary organization has been running Fountain House, a rehabilitation centre for schizophrenic males aged 18-40 years, since 1971. An important aspect of its programmes are collaborative links with the original Fountain House in New York (USA). The results of follow-up studies conducted over 4 years show that programmes and ideas developed in one country can profitably be used in another. The organization of Fountain House, Lahore, is described and its success in reintegrating mental patients into society is evaluated. (DP-E)

- 5173 Divekar, M.V.** *Current aids in diagnosis; part II.* Bombay Hospital Journal (Bombay, India), 19(2), 1977, 88-103. Engl.

A number of recently developed diagnostic techniques are described. Tests are outlined for the diagnosis of diabetes, the syndrome of inappropriate antidiuretic hormones, and growth hormone deficiency. Various tests of thyroid function are also explained, including measurement of basal metabolic rate, evaluation of circulating thyroid-binding proteins, and rate of thyroid production and diagnosis of thyroiditis. Laboratory tests to detect adrenocortical diseases such as Cushing's syndrome, Addison's disease, Conn's syndrome, and pheochromocytoma are also covered. The paper concludes with summaries of tests used in investigating a number of renal diseases, especially kidney malfunctions. (FM)

- 5174 Harrison, P.** *Saving lives at Savar.* World Health (Geneva), Jan 1979, 24-29. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish. In 1972, Gonoshasthaya Kendra (the People's Health Centre) was founded at Savar, Bangladesh, by an inno-

vative 30-year-old physician; now a staff of 114 provide comprehensive health services to over 100 000 rural inhabitants. The centre includes a 15-bed hospital and 4 subcentres, each serving 15 villages and providing a base of 5 or 6 traveling paramedics who perform functions ranging from lumbar punctures to minor surgery such as tubectomies. The activities carried out by one of the paramedics, who average 10 years of general education, 6 months of training, and 9 months of on-the-job experience, are described. The centre has also introduced projects, especially for women, financial schemes, and an elementary school. Some of the problems that the centre has encountered are examined. (DP-E)

- 5175 Mahalanobis, D.** *Treatment of acute diarrhoeal disease in children.* Indian Journal of Preventive and Social Medicine (Varanasi, India), 8(1), Jun 1977, 38-39. Engl.

Basic steps in treating acute diarrhea in children involve correcting shock and restoring hydration, correcting acidosis and potassium loss, maintaining hydration until diarrhea stops, reducing further diarrhea, and maintaining nutrition. The development of an oral glucose electrolyte solution has reduced the need for intravenous liquids for all but the most serious cases of shock. Preparation methods and recommended dosages of the solution are given. In order to prevent malnutrition, normal diet should be resumed as soon as possible. Vomiting is common and usually stops in a few hours. Sugar intolerance can be avoided by including fish and rice in the diets of infants aged more than 3 months. (FM)

- 5176 van Coeverden de Groot, H.A., Davey, D.A., Smith, J.A., Vader, C.G., van der Merwe, F.W.** *Midwife obstetric unit.* South African Medical Journal (Capetown), 53(18), 6 May 1978, 706-708. Engl.

The urgent need for an alternative to domiciliary delivery in Capetown (South Africa) has been met by the development of midwife obstetric units (MOUs). These units are situated in suburbs with a high population density, staffed entirely by midwives, and linked by telephone to the nearest hospital. A flying squad unit is also available. Strict criteria for delivery at MOUs have resulted in very low perinatal mortality and the units have at the same time relieved the serious overcrowding in the teaching hospitals. The MOU concept is particularly suited to Africa and other developing countries. (Modified journal abstract.)

III.2 Outpatient Care

See also: 4959, 4965, 5174, 5262, 5313, 5363.

- 5177 Bhatt, R.V., Pachauri, S., Pathak, N.D., Chauhan, L.** *Female sterilization in small camp settings in rural India.* Studies in Family Planning (New York), 9(2-3), Feb-Mar 1978, 39-43. Engl.

Small female sterilization camps accommodating 10-15 women each were held in six rural primary health centres in the Baroda District, Gujarat, India. Data collected for 2 009 of the women, who were sterilized by means

of the Pomeroy technique, showed operative and postoperative complication rates that compared well with those found among women whose sterilizations were conducted in modern, well-equipped urban settings. The sociodemographic characteristics of the women, the facilities and procedures used, and the clinical findings are described in this paper. Statistical data are included. (HC-L)

- 5178 Bland, J.** *Where there's need.* World Health (Geneva), Dec 1978, 22-25. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

A suburban health centre in La Paz, Bolivia, is described. The staff consists of three doctors, three nurses, and six auxiliary nurses, who share out the work in two shifts. In addition, the nurses visit local families to provide antenatal and postpartum care, health education, and immunization and child health services. The most common problems are respiratory conditions (possibly altitude-related), gastrointestinal diseases, and tuberculosis. The centre also sponsors a 4-month training course for traditional midwives to teach them the rudiments of hygiene and the need for referral. (DP-E)

- 5179 Dissevelt, A.G., Kornman, J.J., Vogel, L.C.** *Antenatal record for identification of high risk cases by auxiliary midwives at rural health centres.* Tropical and Geographical Medicine (Haarlem, Netherlands), 28(3), 1976, 251-255. Engl. 10 refs.

A record for antenatal care that facilitates the selection of high-risk cases has been successfully used by auxiliary midwives in several rural health centres in Kenya since 1972. Special features of the record are its built-in warning system that identifies at-risk pregnancies and indicates the appropriate action the midwife can take according to standards laid down in the procedure manual, its suitability for use during several consecutive pregnancies, and its compactness. A sample record is included. (DP-E)

- 5180 Guerin, N.** *Vaccination: organization, technique and evaluation; an action integrated with other clinic activities.* Children in the Tropics (Paris), (114), 1978, 2-22. Engl.

This special journal issue covers various aspects of vaccination, especially as part of routine clinic activities. Separate sections deal with: reasons for vaccination; current vaccination organization; the vaccination schedule; how to organize vaccinations, including preparation, equipment, record-keeping, etc.; common vaccinations and how they are used, including BCG, DTP, poliomyelitis, measles, smallpox, and tetanus antitoxin; contraindications; answers to practical questions; vaccination records; evaluation; and health education. (DP-E)

- 5181 Hudson, G.J., Pugh, A.O.** *Aspects of rural health: VII: psychiatric services.* Central African Journal of Medicine (Salisbury), 24(8), Aug 1978, 177-179. Engl.

In 1973 in Matabeleland province, Rhodesia, and with the cooperation of the Provincial Health Department,

a system of clinical reviews was set up in 31 rural treatment centres to help alleviate the excessive readmissions of psychiatric patients to hospital, provide advice and assistance in the diagnosis and treatment of mental illnesses, and ensure that only patients requiring specialized treatment were referred to the psychiatric hospital. Health assistants act as interpreters and assess patients' progress in the home environment. Lack of suitable transportation is the major reason for default. Special training courses are held for medical assistants who staff rural hospitals and clinics. (AF)

- 5182 Il, S.K., Sich, D., Han, J.K., Young, K.K., Moon, S.K.** *Development and organization of myun level health care services in Korea.* Yonsei, Korea, Yonsei University College of Medicine, Department of Preventive Medicine and Public Health, Mar 1977. 117p. Engl., Korean.

Although *gun* or county-level health centres presently form the core of Korea's rural health services, experts have recently agreed that a primary organization for rural health care delivery should also be established at the *myun* or township level. This study defines concepts and principles required for the various aspects of health care services organization; establishes referral system models that are feasible in rural Korea; determines the functions of the *myun* health subcentre (MHS); identifies the types, role, and number of MHS manpower; and considers the budget, facilities, equipment, drugs, and materials. Statistical data are included. (RMB)

- 5183 Keilmann, A.A., McCord, C.** *Home treatment of childhood diarrhea in Punjab villages.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(4), Aug 1977, 197-201. Engl. 19 refs.

Among preschoolers under surveillance in a combined nutrition and infectious disease control programme in Punjab, India, incidence of diarrhea averaged 41 episodes per 100 children each month and was the main cause of death. Initial efforts at home treatment were not successful, because mothers failed to recognize the seriousness of the disease and believed that fluid administration aggravated it. These views were eventually overcome by means of an intensive training programme for supervisors, village level workers, and mothers and significant reductions in mortality from diarrhea ensued. The programme's standing orders and statistical evidence of its success are presented. (HC-L)

- 5184 Kyaw, T.A., Nyunt, T., Sundaresan, T.K., Tarizzo, M.L.** *Control of trachoma and prevention of blindness in rural communities in Burma.* Bulletin of the World Health Organization (Geneva), 56(6), 1978, 945-955. Engl.

Also published in French and Spanish.

In a 1961-1962 study, trachoma was identified as the single most important cause of blindness in Burma. Control measures started in 1964 reduced the prevalence of active trachoma by 60%; the success of this control programme emphasizes the importance of the active participation of the community and the role of local

auxiliaries. Most of the activities, including surgical repair of trachiasis, are the responsibility of health assistants, whose training includes, in addition to the recognition and treatment of patients requiring antibiotics or surgery, screening and referral of more serious conditions. The trachoma control programme has been expanded to include other eye diseases and conditions. Statistical data are included. (DP-E)

- 5185 Lapeyssonnie, L., Omer, I.A., Nicolas, A., Roumiantzeff, M.** *Etude de la réponse sérologique d'enfants soudanais à la vaccination combinée triple (rougeole, tétanos, méningite A).* (Study of the serological response of Sudanese children to three combined immunizations (measles, tetanus, meningococcal A meningitis)). *Médecine Tropicale* (Marseille, France), 39(1), Jan-Feb 1979, 71-79. Fren. 24 refs.

A study of the effectiveness of a triple vaccine was carried out on 87 children aged 3 months-9 years who were living on the outskirts of Khartoum, Sudan. The characteristics of the vaccine, method of vaccination, and results of serological studies are described. The authors maintain that a combined anti-measles, anti-tetanus, and anti-meningitis vaccine gives satisfactory results with no adverse side effects. They recommend a vaccination programme based on mass, needleless injections, the use of associated vaccines, and a schedule consisting of a primary vaccination, followed by visits at 6 month intervals. Statistical data are included. (FM)

- 5186 Medical Tribune, New York.** 'Prepaid' health care program initiated. *Medical Tribune* (New York), 20(2), 7 Jun 1978. Engl.

Some 45 000 Indonesians are contributing approximately 0.5% of their income, or about US\$0.06 per month (rich people pay more), to a prepaid health insurance plan. Care is provided by the local hospital's outpatient clinic and a health centre staffed by a physician. Each family has its own *Dana Sehat* or health fund book, which is kept by the fund leader. Medicines prescribed from the clinic dispensary are billed at cost in this book and each month the fund pays the clinic for drugs and doctor's fees. A midwife is responsible for preventive, primary, and maternal child health care and health and nutrition education. (DP-E)

- 5187 Metelsky, J.** *Caring for health.* *Agenda* (Washington, D.C.), 1(11), Dec 1978, 13-16. Engl.

AID's Montero (Bolivia) health project delivers maternal child health, family planning, nutrition, disease control, and environmental health services to 12 000 inhabitants of 24 rural communities. The project has so far vaccinated 60% of the children aged less than 12 years against major childhood diseases and built an auxiliary nurses' training school and an administrative building. Assisted by rural health promoters who identify and refer cases, a health team consisting of a physician, a nurse, a laboratory technician, a statistician, and a sanitation technician provide curative and preventive services to the villagers. Some of the cultural difficulties encountered are discussed. (DP-E)

- 5188 Moss, H.L.** *Vision screening project, Eilat, Israel.* *Journal of the American Optometric Association* (St. Louis, Mo.), 49(1), 1978, 58-60. Engl.

The author relates his experience in developing and conducting a vision screening programme for 11 522 children aged 1-6 years in Eilat, Israel. The programme is based on a simple, effective, 2-minute procedure that can be carried out by nurses. The necessary conditions and equipment are listed and the steps of the procedure are described. Programme results indicate a low overall referral rate of 7.5%, probably due to the early and careful attention most of the children received. (Modified journal abstract.)

- 5189 Mudambi, S.R.** *Assessment of marginal nutrition in Nigerian children.* *Journal of Tropical Pediatrics and Environmental Child Health* (Kampala), 22(5), Oct 1976, 205-206. Engl. 8 refs.

The advantages of using a ratio of mid-arm circumference to head circumference as a method of assessing a child's nutritional status are that it is quick, can be performed by minimally-trained workers, and does not depend on knowledge of the child's age. This paper describes a study in which the method was used to detect mild and moderate malnutrition in 321 children aged less than 5 years from various regions and backgrounds in Nigeria. Statistical data are included. (HC-L)

- 5190 Nugroho, G., Elliott, K.** *Dana Sehat programme in Solo, Indonesia.* In *Technologies for Rural Health*, London, Royal Society, 1977, 145-150. Engl.

Royal Society Discussion of Technologies for Rural Health, London, UK, 9-10 Dec 1976.

For complete document see entry 5225.

Indonesia's Dana Sehat programme provides a framework within which the community, community leaders, and health personnel can work together to develop a health care system that suits the needs and capabilities of the community. For example, the community can use the Dana Sehat to develop a prepaid health care scheme, which also aims to raise income, improve living conditions, and increase the community's understanding about health and its relationship to environment and nutrition. Thus, the Dana Sehat can serve as a foundation for primary care and rural development. (Modified journal abstract.)

- 5191 Senanayake, I.P.** *Use of home based records in the evaluation of a health care system.* *Journal of Tropical Pediatrics and Environmental Child Health* (Kampala), 23(5), Oct 1977, 220-223. Engl.

Some of the advantages of home-based child health records are that they encourage parents to play an active part in caring for their children, they are available should the child attend a hospital or new health centre, and they eliminate time spent retrieving and filing records in the clinic. They can also serve as a useful source of information during field surveys. This paper describes a study undertaken at four child health clinics in Nigeria, Malawi, and Zambia that proves the feasibility of mea-

asuring the impact of a clinic on the community by gathering data from home-based health records. Statistical data are included. (HC-L)

- 5192 Wilson, W.M.** *Impact of two-way radio on the medical practice of a remotely deployed physician's assistant.* Ann Arbor, Mich., University Microfilms International, Jun 1977. 108p. Engl. Dissertation submitted to the University of Utah in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Health: Health Science.

A medex in Dubois, Wyoming (USA), and his supervising physician in Riverton, Wyoming (86 miles away) were linked via the installation of a VHF high band radio system. Following the changeover from in-person and telephone supervision to direct supervision using the radio system, information was collected on communication patterns, patterns of patient care and referrals, cost data, and attitudes. Statistically significant decreases in patient referrals to the physician occurred. Differences in patient volume, patient demographics, and diagnoses were also noted. Both patients and health workers expressed greater confidence in the health care provided and the medex was also more satisfied with his role. (Modified journal abstract.)

III.3 Mobile Units and Services

- 5193 Brown, R., Venzon, D., Manchester, T.** *Control of endemic goitre by iodized oil in a community health programme.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(3), 1978, 274-276. Engl.

After a 1976 survey revealed that goitre was endemic (28.5%) in nine villages in Bulape, a rural area of Zaire, a mobile health unit delivered intramuscular iodized oil injections to more than 14 000 inhabitants of the region as part of a community health programme. No complications were encountered. Reductions (if any) in the size of the goitres of the affected population were not evaluated. A 2nd series of injections is scheduled for 1980. Statistical data are included. (DP-E)

- 5194 George, E.** *Better vision for Kenya; a roving eye clinic brings the gift of a lifetime of sight to thousands of Kenyans each year.* Agenda (Washington, D.C.), 1(7), Jul-Aug 1978, 1-4. Engl.

A mobile eye unit in rural Kenya examines more than 40 000 patients a year. Connected with the eye department of the hospital at Nakuru, the closest city, the project is staffed by two doctors and five clinical officers. An important part of their work is educational and visits to schools begin with lectures on the role of proper hygiene and nutrition in preventing blindness. After eye examinations, ointment is dispensed to those with problems. Serious eye diseases requiring surgery are treated at the hospital, where 3 000 eye operations are performed each year. Trachoma and cataracts are common. (FM)

- 5195 Gish, O., Walker, G.** *Alternative forms of transport and their use in the health services of developing countries.* International Journal of Health Services (Westport, Conn.), 8(4), 1978, 633-651. Engl. 70 refs.

This article examines the uses of mobility in health services and the merits of different forms of transport within the resource constraints and health needs of developing countries. The authors conclude that, in more cases, appropriate intermediate technology transport should be used: bicycles, animals, or motorcycles. The use of mechanical transport, especially aircraft, within health services with the highest benefit per unit cost is likely to be that employed in regular supportive (not policing) visits to permanently staffed outposts by more highly skilled and scarce health personnel. Statistical data are included. (Modified journal abstract.)

- 5196 Scotney, N.** *Home visiting for health education.* AFYA (Nairobi), 11, May-Jun 1977, 84-88. Engl.

Originally published as Chapter 9 in entry 1933 (volume 3).

Regular maintenance of family health records and a commitment on the part of health services to take more responsibility for those living in remote areas are necessary components of an effective home visiting programme. Starting with follow-up visits to patients attending the clinic, the health visitor should systematically expand her coverage area and actively seek out new cases. Recording the visit should take into account the sanitary conditions and facilities of the house, the family's attitudes to health and disease, health education topics discussed, and recommendations for follow-up visits. All staff should participate in these visits. (FM)

- 5197 Soriano, M.B.** *Health on wheels: public service of a private hospital.* Initiatives in Population (Manila), 3(2), Jun 1977, 24-28. Engl.

A mobile health unit connected with the Lorma Medical Centre visits remote *baranguays* in the Philippines. Staffed by 1 physician, 2 nurses, and 2 nursing students, the clinic averaged 861 cases monthly in 1977. The history and gradual expansion of the unit are described, as well as its daily activities. Other projects of the Centre's outreach programme include short radio broadcasts on health education. Intensive, 3-day seminars held at the Centre train village volunteers to treat simple diseases in the absence of regular health workers. As part of the nursing programme, each student nurse adopts a family for the duration of her training and keeps a record of their health and living conditions. (FM)

III.4 Health Education

See also: 4914, 5021, 5022, 5207, 5314, 5315, 5321, 5343, 5346.

- 5198 Backheuser, M.P., Kampel, M.M., Pereira da Costa, M.** *Programa de educação comunitária para saúde. (Programme of community health education).* Boletín de la Oficina Sanitaria Pan-

americana (Washington, D.C.), 84(3), Mar 1978, 251-261. Portuguese.

The community Education Programme for Health, part of the ongoing education project of the Brazilian Literacy Movement, operates mainly by involving communities in the discussion and resolution of their own health problems. These efforts are coordinated by a community member called a monitor. The programme and communities have conducted joint activities that range from drives for digging cesspools and acquiring filters to informal musters of neighbourhood volunteers to clean and renovate houses. It is hoped that the programme will cover 50% of Brazilian communities by 1980. (Modified journal abstract.)

- 5199** Bamisaiye, A., De Sweemer, C., Ransome-Kuti, O. *Developing a clinic strategy appropriate to community family planning needs and practices: an experience in Lagos, Nigeria.* Studies in Family Planning (New York), 9(2-3), Feb-Mar 1978, 44-48. Engl. 15 refs.

In southern Nigeria, desired birth intervals, typically 2-3 years in length, have been achieved largely through the traditional practices of breast-feeding and sexual abstinence. In order to make the most effective use of both traditional practices and modern contraception, the Lagos Family Health Clinic, after analyzing responses to family planning questions in their 1975 health survey, developed strategies to facilitate introduction of modern family planning methods during the weaning period. These programmes include regular home visits to mothers of preschool children, family planning clinic counseling at the time of weaning, and the organizing of a fathers' club to provide education about the clinic's programme. (Modified author abstract.)

- 5200** Billington, R. ed(s). *Health has many faces.* London, Edinburgh House, 1978. 108p. Engl. Refs.

This book points out a number of non-medical ways in which a Christian hospital or clinic in a developing country can improve health status in the local community. Its various chapters describe actual projects that have been carried out to provide health care at village level, grow more food, provide simple water supplies, give training in crafts and skills, teach reading, encourage people to save money together, and build low-cost houses; an additional chapter shows how many of these activities have been linked together in rural areas. Each chapter is followed by a short list of books for further information. (HC-L)

- 5201** Brasil, Ministério da Saúde. *Programa educativo de prevenção ao uso de tóxicos para estudantes de 1ª e 2ª graus.* (Educational programme on the prevention of drug addiction for primary and secondary students). Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Educação em Saúde, Conselho Federal de Educação, Câmara Técnica de Entorpecentes e Tóxicos, No. 4, 1979. 52p. Portuguese. Refs.

Drawn up by a working group, guidelines are presented for a health education programme designed to prevent drug addiction in students in Brazil's elementary and secondary schools. Separate sections of this document cover general considerations, objectives, programme content, methodology, strategies, supervision and evaluation, and data collection. There is a bibliography. Annexes contain suggestions for training the schoolteachers involved in the programme, a sample evaluation form, and relevant legislation. (RMB)

- 5202** Brasil, Ministério da Saúde. *Educação em saúde hanseníase; proposição para os níveis de atendimento em saúde pública. 2 edição revista.* (Health education in leprosy; proposal for levels of care in public health. 2 edition rev.). Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Educação em Saúde, Divisão Nacional de Dermatologia Sanitária, No. 3, 1979. 57p. Portuguese. 8 refs.

In response to a government directive, leprosy services are now offered to Brazilian patients in health posts, health centres, and a number of specialized facilities. An important element of these services is health education. This booklet describes the rationale, objectives, and methodology of leprosy education. Available teaching aids are listed and a means of combining health education measures with leprosy control efforts is examined. An outline of the leprosy health education activities to be carried out at each level of care contains the type of health care worker involved, the specific activities of each worker, and the objectives and educational goals of these activities. Leprosy workers include nursing auxiliaries, nurses, general practitioners, physiotherapists, and physicians specializing in the disease. (RMB)

- 5203** Colombia, Ministerio de Salud Pública, Instituto Colombiano de Bienestar Familiar. *Niños; educación con participación de la comunidad.* (Children; education with community participation). Bogotá, Ministerio de Salud Pública, Instituto Colombiano de Bienestar Familiar. Span.

This monthly publication with a Latin American orientation carries informative articles on and constructive examples of the care and education of preschool children in the home and in the community. An account of a pilot project in Peru, whereby nursery schools are used to promote child health and development and to promulgate good parenting skills, is a sample of the latter. The publication is illustrated with numerous appealing photographs and colourful drawings. It could be profitably read by parents, child care workers, and health workers alike. (HC-L)

- 5204** Ferreira Candias, N.M., Sandoval Marcondes, R. *Identifying educational needs of schoolchildren in a secondary school in São Paulo.* International Journal of Health Education (Geneva), 23(1), Jan-Mar 1980, 42-48. Engl.

Also published in French, German, and Spanish. In São Paulo, Brazil, 149 students, 14 parents, and 6

teachers were surveyed regarding their principal health concerns. Striking differences between the pattern of health interests expressed by the three groups were observed. This paper describes the survey methodology, discusses its advantages, and presents its results. (HC-L)

5205 Gibson, D. Which medium for the message?

World Health (Geneva), Jan 1979, 20-23. Engl. Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish. The findings of a Berlin (Germany) workshop on Medicine and the Mass Media indicate that health information is not reaching those who need it most because of poverty, illiteracy, technical barriers, language problems, and a wall of mistrust and suspicion dividing doctors and journalists. Although television has the greatest impact, television sets are few and far between in developing countries and illiteracy prevents many people from reading newspapers and posters. Therefore, radio, despite the expense of sets and poor reception, presents the best opportunity for health education in rural areas. Problems such as message format, evaluation, government control, etc., are examined. (DP-E)

5206 Helsing, E. Lactation education: the learning of the 'obvious'. *Excerpta Medica* (Amsterdam). Ciba Foundation Symposium 45(new series), Breast-feeding and the Mother, 1976, 215-230. Engl. 12 refs.

Widespread adoption of artificial infant feeding in urban and transitional societies has led to the loss of traditional experience in coping with breast-feeding problems and the failure of some mothers to nurse. This paper discusses the type of lactation education that should be aimed at mothers, health workers, and the general public in order to counteract this trend. (HC-L)

5207 International Union for Health Education, Paris. Abstracts/Résumés/Resúmenes. Paris, International Union for Health Education, 1976. 209p. Engl., Fren., Span. Ninth International Conference on Health Education, Ottawa, Canada, 29 Aug-3 Sep 1976.

This monograph contains abstracts of the papers that were accepted for presentation at the 9th International Conference on Health Education (1976), held in Ottawa, Canada. Listed also are titles of papers received after the deadline. In addition to the abstract, each entry contains the title of the paper and the name(s) and address(es) of the author(s). The papers examine various issues and projects in health education. (DP-E)

5208 Irving, J.H. Using television for health education in rural India. *Comparative Medicine East and West* (New York), 6(2), Summer 1978, 109-113. Engl.

The author relates his experience in adapting the medium of television to the purpose of health education in rural India. Working under the auspices of the Indian Ministry of Health and UNESCO, he gained experience in the "appropriate" application of sophisticated Western technology to the needs of a developing area. Television

is not a panacea for health education needs but it is nevertheless an important element in an overall health care strategy that must also involve the efforts of health administrators and practitioners at every level of society to further public education and preventive measures. (Modified journal abstract.)

5209 Jancloes, M. Participation des communautés rurales et objectifs sanitaires de démarrage dans la zone de Kisantu (Zaire). (*Participation of rural communities and the establishment of basic health objectives in Kisantu zone (Zaire)*). Louvain-la-Neuve, Belgique, Université Catholique de Louvain, Ecole de Santé Publique, Unité d'Epidémiologie, 1977. 1v.(various pagings). Fren. 151 refs.

Doctoral dissertation presented to the Université Catholique de Louvain, Louvain-la-Neuve, Belgium, 1977.

The author divides his study of rural participation in health care in Kisantu, Zaire, into 4 main chapters. In chapter 1, he presents background information on the historical evolution of medico-hospital structures and medical knowledge in the area and describes preventive and curative activities. Chapter 2 analyzes and evaluates the major health problems, especially intestinal parasitic diseases, and the utilization of medical facilities. Chapter 3 outlines a 5-year health education programme at the village level to encourage individual awareness and self-care. The final chapter contains an evaluation of the effects of the programme by measuring the increase in public utilization of health resources. (FM)

5210 Munroe, P.A., Pieters, L., Isaacs, A. Guyana's "metric baby" programme gives boost to breast feeding. *Cajanus* (Kingston, Jamaica), 12(4), 1979, 236-239. Engl.

In early 1979, 10 "metric babies," newborn Guyanese infants, were chosen as a live symbol to alert the public to the changes involved in the conversion of the measurement system to metric by 1982; their progress is reported quarterly with all measurements in the metric system. Whereas a recent survey of preschool children showed a high incidence of malnutrition among those who were bottle-fed, the 1st quarterly report of the "metric babies" in March 1979 showed a rapid rate of growth and development among breast-fed babies. It is hoped that this will encourage mothers to breast-feed their babies. (AF)

5211 Nagaraj, S., Rao, K.G., Abrol, U., Mehta, J.N., Saxena, H.M. Integration of health education and medical care. *Health and Population* (New Delhi), 1(3), Jul-Sep 1978, 230-242. Engl.

A survey was conducted among 356 patients and 229 workers in 2 teaching hospitals and 2 health centres in India to study the integration of health education and medical care. Results showed that 49% of the workers felt that health education could be best rendered if integrated with medical care services. An analysis of communication between workers and patients indicated that most of it was instructional, directional, routine in na-

ture, and individually motivated in an unplanned manner. The study suggests that better integration can be achieved by strengthening the workers' training in health education. (Modified journal extract.)

- 5212 Phillips, M.A.** *Health education in leprosy: the problem of overcoming fear and misconceptions.* International Journal of Health Education (Geneva), 21(2), Apr-Jun 1978, 130-136. Engl. 12 refs. Also published in French, German, and Spanish; see also entry 1686 (volume 3).

In Uganda, fear and misconception are the greatest barriers to leprosy treatment and control. The government of Uganda has made a special effort to overcome these problems, mainly by sponsoring health education activities aimed at the general public, patients, their families, and specific target groups, such as teachers, community development workers, and tribal chiefs. These activities are described in detail. (DP-E)

- 5213 Rao, T.V.** *Informational and documental needs for motivation, education, and communication aspects of health and family welfare.* Health and Population (New Delhi), 1(3), Jul-Sep 1978, 205-219. Engl.

The many different types of information relevant to family health and welfare can be divided into three groups. The 1st includes information designed to increase motivation of both health workers and the public. The 2nd involves educational information including population education, health education, developmental activities, fertility control methods, family welfare planning, continuing education, administrative practices, and education methods. The 3rd type relates to communication: interpersonal, mass, and organizational. Categories of people requiring information are outlined and their differing needs are considered. Sources of basic and advanced information are discussed and suggestions made for organizing and disseminating information. (FM)

- 5214 Ross, D.A.** *Serabu Hospital village health project.* Contact (Geneva), 49, Feb 1979, 1-9. Engl.

The Serabu Hospital village health project, based in a 125-bed hospital in a rural Sierra Leone village of 2 500 inhabitants, was established in 1978 to develop primary care programmes in local villages because villagers refused to attend the hospital except in cases of serious illness. Each village selects a health committee from among its own members (all traditional health practitioners are included) who carry out and promote a series of health-related activities under the supervision of a nurse. In the 1st year, these health committees helped to conduct a census, dig two wells, construct 12 latrines, improve agricultural practices and road communications, and establish an effective referral system. Statistical data are included. (DP-E)

- 5215 Skaling, M.M.** *Troubles and triumphs mold small rural hospital education.* Hospitals (Chicago, Ill.), 52(2), 16 Jan 1978, 55-58. Engl.

Through development of institutional education policies and judicious use of available resources, rural hospitals can more effectively address their needs in the areas of continuing education and patient and community education. Sharing arrangements and educational consortia offer rural hospitals methods for greatly expanding the resources available to them. In addition, sharing arrangements that are heavily dependent on technology, such as multihospital telephone conferencing and inter-institutional and satellite television systems, are being used to address educational needs of hospitals in only a few rural areas in the USA but offer possibilities for the future. (Modified journal abstract.)

- 5216 Tumilson, G.** *Exercise in dental health education.* Papua New Guinea Medical Journal (Boroko, Papua New Guinea), 20(3), Sep 1977, 125-130. Engl.

Three different teaching methods used to instruct Papua New Guinea high school students in oral hygiene are described and compared. Despite efforts to identify better teaching techniques, neither of the sessions based on lectures and demonstrations resulted in improved dental health. However, when, in the 3rd attempt, school teachers took time from health class each day to supervise their students' toothbrushing, there was a fast and dramatic improvement in both oral hygiene and gingival health. Since teachers and aid post orderlies are the only government workers present at village level, the author suggests that they be given special training in dental education and health. (DP-E)

III.5 Appropriate Technology

See also: 5006, 5167, 5195, 5205, 5208, 5316, 5341, 5408, 5444.

- 5217 Chouhan, B.S.** *Early detection of vitamin A deficiency in the field.* Rajasthan Medical Journal (Rajasthan, India), 15(3), Jul 1976, 161-170. Engl. 27 refs.

See also entry 4034 (volume 6).

A method of staining children's eyes in order to detect vitamin A deficiency has been tried for the 1st time and, in order to test its efficacy in the field, a comparative evaluation is carried out with the clinical examination method. A study of 50 children from Jaisalmer district, India, was undertaken. It was observed that the younger age group suffered more than the older and that males were more affected than females. On comparison, it was noted that the staining method was equally reliable and at par with clinical examination. The method is stated to be free from adverse effects. (Modified journal abstract.)

- 5218 Delgado, H., Lechtig, A., Martorell, R., Klein, R.E.** *Aplicación de técnicas simplificadas a programas de salud maternoinfantil: los aspectos nutricionales de alto riesgo. (Application of simplified techniques to maternal and child health programmes: high risk nutritional aspects).* Boletín de la Oficina Sanitaria Panamericana

(Washington, D.C.), 84(4), Apr 1978, 295-304. Span. 28 refs.

Longitudinal studies conducted by INCAP (*Instituto de Nutrición de Centro América y Panamá*) in Guatemala have established the value of a number of criteria in assessing a woman's risk of having a low-birth-weight baby. The criteria include the woman's height, cephalic perimeter, arm circumference, and such indications of her socioeconomic status as housing, land tenures, etc.; they are easily used by auxiliary personnel under field conditions to pinpoint those groups of mothers and children most in need of nutritional supplementation. This paper describes some of the studies justifying their use and the methodology for their application. Statistical data are included. (HC-L)

- 5219** Dustin, J.P., Ecoffey, J.P. *Field test for detecting iodine-enriched salt*. Bulletin of the World Health Organization (Geneva), 56(4), 1978, 657-658. Engl.

Also published in French and Spanish.

A simple field tool has been devised by which health workers without training in chemistry can determine whether or not a sample of table salt has been enriched with the required amount of iodine. All necessary equipment can be easily assembled in a small portable kit: a number of flasks and dripper bottles to contain the solutions described in this article, powdered starch, and iodized salt. Instructions for carrying out the tests are given. (DP-E)

- 5220** Glatthaar, E., Kleeberg, H.H. *Evaluation of BCG vaccines and a new method of multipuncture administration*. South African Medical Journal (Capetown), 52(16), 8 Oct 1977, 633-638. Engl. 26 refs.

In comparative investigations, the Japanese vaccinating tool described here was found to be more satisfactory for BCG administration than the Heaf multipuncture apparatus and well suited for use in South Africa. Immune responses achieved by 27 punctures made by the Japanese applicator were equal to those produced by 40 punctures made by the Heaf apparatus and were similar to results obtained with the intradermal method. The Japanese applicator is simple to use, durable, and cheap. The studies also confirmed the high quality of the Japanese intradermal and percutaneous BCG vaccines. Administration of the potent percutaneous Japanese vaccine with the Japanese applicator is a safe and effective method of BCG vaccination. (Modified journal abstract.)

- 5221** Hansen, J.A., Therkelsen, H. *Alternative sanitary waste removal systems for low-income urban areas in developing countries*. Viborg, Denmark, Polyteknisk Forlag, 1977. 143p. Engl.

Using the outskirts of Lagos, Nigeria, as the basis of their study, the authors evaluate six alternative waste removal systems suitable for urban, high-density, low-cost housing areas. Following background material on developments in sanitation systems and the study site, they examine a full sewerage system, an aqua privy with

piped liquid disposal, a house vault and vacuum truck, a house bucket and ablution block, and a multrum. The influence on cost of such factors as population density, service levels, and terms for capital loans are also discussed. The study concludes that the aqua privy or the ablution block are the most suitable systems. (FM)

- 5222** Kale, O.O. *Simplified technique for counting onchocercal microfilariae in skin snips*. Bulletin of the World Health Organization (Geneva), 56(1), 1978, 133-137. Engl. 8 refs.

Also published in French and Spanish.

A new method for counting microfilaria in skin snips, used to diagnose onchocerciasis, is described. Patients attending the endemic disease clinic of the University College Hospital, Ibadan, Nigeria, participated in a two-part study. The method, in which slide specimens are reconstituted after drying, is compared quantitatively with two existing methods that are used when the counting of microfilaria has to be postponed. Counts obtained by the new method were closely correlated with those taken in fresh specimens. Other advantages of the new method are discussed and its use in onchocerciasis field surveys is recommended. Statistical data are included. (Modified journal abstract.)

- 5223** Lundbeck, H., Hakansson, B., Lloyd, J.S., Litvinov, S.K., Assaad, F. *Cold box for the transport and storage of vaccines*. Bulletin of the World Health Organization (Geneva), 56(3), 1978, 427-432. Engl.

Also published in French and Spanish.

A cold box capable of maintaining a temperature below 4°C for 1 week was constructed and tested in a Swedish laboratory and under field conditions. Cooling is produced by commercial, precooled ice packs. The box can hold approximately 3 000 doses of vaccine and is simply constructed, cheap, and strong. It is primarily intended for storage of vaccines during field trips by vaccination teams, as an alternative to the refrigerator in regional and peripheral stores in case of an electrical power failure, and for delivery of vaccines to outposts. Photographs of the box and statistical data are included. (Modified journal abstract.)

- 5224** Oyediran, M.A., Ziegler, H.D., Ojo, M.A. *Scoring system for sick children*. British Journal of Preventive and Social Medicine (London), 31(2), Jun 1977, 127-130. Engl.

This scoring chart for sick children, a sample of which is included, measures the vital signs of temperature, respiratory and pulse rates, and the central nervous system. When the chart was tested on 68 randomly-selected children from a Lagos (Nigeria) clinic, the results showed that, although values overlapped when related to clinical impression, there was an inverse correlation with the severity of the illness. Doctors' and nurses' scores were similar. The chart shows promise as a screening tool for use by health workers other than physicians and nurses. Statistical data are included. (Modified journal abstract.)

- 5225 Royal Society, London. *Technologies for rural health*.** London, Royal Society, 1977. 187p. Engl. Refs.

Royal Society Discussion of Technologies for Rural Health, London, UK, 9-10 Dec 1976.

Individual chapters have been abstracted separately under entries 3634, 3646, 3652, 3731, 3761, 3800, 3808 (volume 6), 4287, 4811 (volume 7), 5006, 5076, 5145, 5190, 5392, and 5393.

This collection of papers from a Royal Society discussion covers appropriate technologies for health in the areas of the provision of primary medical care, family spacing and limitation, and basic organization and health. Specific topics include agricultural and environmental health improvements, planning, nutrition, child health, immunization, rehydration therapy, and family planning. This volume also contains the opening and closing addresses and a summary of the discussion provoked by the papers. (DP-E)

- 5226 Ryczynski, W., Polprasert, C., McGarry, M.** International Development Research Centre, Ottawa. *Low-cost technology options for sanitation; a state-of-the-art review and annotated bibliography*. Ottawa, International Development Research Centre, 1978. 184p. Engl. Refs.

This book brings together scattered literature, much of it unpublished, on non-waterborne excreta disposal technologies. There are 2 parts: a discussion of present knowledge and an annotated bibliography of 531 items that will form the basis of an excreta disposal reference centre in Bangkok. Alternative technologies for waste disposal and recycling are examined for both rural and urban areas, including underlying principles, basic design, and examples wherever possible. (DP-E)

- 5227 Siddamma, T., Venkatramaiah, S.R.** *Index for measuring obesity in children*. Indian Journal of Pediatrics (Calcutta, India), 44(352), May 1977, 121-126. Engl. 8 refs.

In Tirupati, India, a pictorial rating scale (PRS) and two anthropometric measurements, body weight and triceps skinfold, were used to develop a suitable index of obesity for children aged 9-11 years. The PRS consisted of three contour outlines of nonobese, mildly obese, and severely obese children, which were reduced to 10 cm x 10 cm in size. The PRS was given to three selected teachers who

identified children similar to any of the three figures on the rating scale. The relations between body weight and triceps skinfold were significant and positive. It is concluded that the PRS was adequate in screening obese children. (Modified journal abstract.)

- 5228 Welch, J.T., Oller, J.A.** *From the clinic: technique for weighing bed patients*. American Corrective Therapy Journal (Rehoboth Beach, Del.), 31(6), 1977, 170-171. Engl.

This paper describes how a standard cotton scale can be adapted for use in weighing patients who are confined to a bed in their own homes or in a health care facility. A photograph of the adapted scale is included. (HC-L)

- 5229 WHO, Geneva.** *Appropriate technology for health newsletter*. Geneva, WHO. Engl. Also published in French and Spanish.

Readers of this irregularly-published newsletter are encouraged to send letters giving comments, descriptions of new ideas, adaptations of old ideas, etc., in the field of appropriate health technology. A sample issue contains articles on heating a physiotherapy pool, recovering the silver from used X-ray films, testing thermometers, and producing inexpensive well screens and a midwifery teaching aid; a bibliography of suggested titles for an appropriate health technology library is included. (DP-E)

- 5230 WHO, Geneva.** *Laboratory services at primary health care level*. WHO Chronicle (Geneva), 33(9), Sep 1979, 334-337. Engl.

Also published in French, Russian, and Spanish. WHO's programme of health technology relating to primary health care and rural development includes collaboration with national health authorities in establishing laboratory services that are appropriate, inexpensive, acceptable, and easily performed by laboratory personnel at the peripheral level. In that connection, WHO has prepared a 20-page document *Laboratory Services at Primary Health Care Level*, which is summarized in this article. Topics covered include the health centre laboratory, essential laboratory tests for use in the health centre, laboratory services in a primary level hospital, collection and dispatch of laboratory specimens, and training of laboratory workers. (Modified journal abstract.)

IV Health Workers — Training and Utilization

IV.1 Medical Personnel

IV.1.1 Professional

See also: 4937, 5255, 5320, 5337, 5351, 5367, 5405.

- 5231** *New integrated course in preventive and community medicine.* Medical Education (Oxford, UK), 11(4), 1977, 267-270. Engl.

An integrated course in preventive and community medicine was introduced at the Christchurch Clinical School, New Zealand, in 1974. Details of the 4th and 5th clinical years as well as the elective studies in the trainee intern (6th) year are presented. The implications of the topic studies, rotating attachments, preventive medical examinations, preventive medical ward rounds, problem-oriented record studies, simulated disabilities, and clinico-pathological conferences are discussed. Some preliminary conclusions are drawn from the evaluation of this course. (Modified journal abstract.)

- 5232** **Aggarwal, O.P.** *Study of some aspects of administration of medical education in India.* Health and Population (New Delhi), 1(3), Jul-Sep 1978, 220-229. Engl.

During a study of the administration of medical education in India from 1976-1977, information pertaining to admission capacity and procedure, system of examinations, staffing patterns, and pay scales was received from 30 medical colleges. The author found a lack of uniformity in the administrative set-up of medical colleges that were run by different states or organizations. The differences are most striking in admission procedures, teacher classification, pay structures, provision of non-practicing allowances, and marks allotted for different subjects in examinations. He recommends a uniform system of administration patterned after the University Grants Commission. (Modified journal abstract.)

- 5233** **Benchakan, V., Rattakul, P., Osathanondh, V., Chaturachinda, K.** *Training physicians of developing nations in female surgical contraception.* International Journal of Gynaecology and Obstetrics (Baltimore, Md.), 15(5), 1978, 459-461. Engl.

The majority of developing nations, including Thailand, face similar problems arising from uncontrolled population growth. One of the most effective medical solutions is surgical contraception. This study describes how the Ramathibodi National Training Program was developed and implemented in Thailand to increase the availability

of sterilization services by training local physicians to perform the necessary operations. The success of this programme is measured by the increase in the number of service delivery stations (182) and sterilization procedures performed (24 436 in a 32-month period). (Modified journal abstract.)

- 5234** **Buri, R., Katz, F.M.** *Faculty of Medicine, Ramathibodi Hospital, Bangkok, Thailand: teaching community health care.* Public Health Papers (Geneva), 70, 1978, 153-167. Engl.

The Faculty of Medicine at Ramathibodi Hospital (Thailand) has initiated a community health care programme to train physicians and other health workers to function effectively at primary health centres using the available resources. The programme offers preclinical and clinical courses, provides health care services in model centres, and conducts operational research and short-term workshops. Several interesting organizational characteristics of the programme include its inter-departmental nature and a multiprofessional teaching staff. An early evaluation indicates that fewer graduates are going abroad and a higher percentage of those with rural experience are choosing to do internships in provincial hospitals. (DP-E)

- 5235** **Cantrell, T., Abramsky, L.** *Design of short teacher-training courses.* Medical Education (Oxford, UK), 11(5), 1977, 311-318. Engl. Refs.

A survey was taken of 28 courses in 10 countries designed to train teachers of medical students. It was found that few medical schools operate their own programmes but rely on university course offerings. These tend to be short and to emphasize teaching methods rather than the learning problems of students. Most use a structured lecture approach, although some have adopted the group study system. The report recommends certain programmes, especially those advocating group study, flexibility of course design to meet individual needs, spaced-out sessions allowing time for reading and reflection, and evaluation of training effectiveness. (FM)

- 5236** **Daschbach, C.C., Chinnis, N.A.** *Medicine in Mexico; IX: medical education.* Arizona Medicine (Scottsdale, Ariz.), 35(6), Jun 1978, 408-409. Engl.

A 1976 survey of 38 Mexican medical schools revealed that: 1st-year enrolments had increased by almost 12 000 in 4 years, while the total number of medical students had increased by 36 146; the desertion rate was 39%, varying from 12%-81%; the average student:teacher

ratio was 9:1; and over 7 000 medical students graduated in 1976 with an anticipated 12 500 graduates in 1979. In contrast, Mexico's 110 general nursing schools graduated only 2 300 students in 1975 and no increase is expected. The case for government control of the quality of medical education is briefly presented. (DP-E)

- 5237 Educación Médica y Salud, Washington, D.C.** *Informe del Comité del Programa de Libros de Texto de la OPS/OMS para la Enseñanza de la Medicina Preventiva y Social en las Escuelas de Medicina de la América Latina. (Report of the Committee of the PAHO/WHO Programme of Textbooks for the Teaching of Social and Preventive Medicine in Latin American Medical Schools).* Educación Médica y Salud (Washington, D.C.), 9(2), 1975, 211-223. Span. Segunda Reunión del Comité del Programa de Libros de Texto de la OPS/OMS, Washington, D.C., 5-13 Sep 1974.

Since the early 1950s, Latin American medical schools have concerned themselves with developing norms for incorporating preventive medicine into their curricula. The greater part of this report constitutes a review of the methods adopted, obstacles encountered, and progress attained in the pursuit of this aim; the last part discusses teaching materials in social medicine pending the development of a textbook specifically suited to the needs of the Latin American undergraduate. (HC-L)

- 5238 Guerrero, R.** *Use of primary health care facilities in South America in the training of health professionals.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 111-121. Engl. Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977. For complete document see entry 4937.

The health division of the *Universidad del Valle* in Cali, Colombia, has been actively involved in the process of utilizing health care facilities other than the university hospital for teaching purposes. As a result of a 1974 curriculum reform, 1st-year medical students began to have contacts with patients in primary care facilities and, at the end of the 2nd year, they could carry out the duties of an auxiliary nurse. Much of the teaching is done by nurses. This approach has produced a drastic change in the attitudes of medical students towards both nurses and the health team. The advantages and disadvantages of such innovative approaches are discussed. (DP-E)

- 5239 Hansen, J.D.** *Role of the doctor in the changing health service.* South African Medical Journal (Capetown), 54(4), 22 Jul 1978, 161-165. Engl. 21 refs.

During the last 25 years, there has been a gradual change in the doctor's role from that of a personal provider of health care to that of the leader of a health care team. For the doctor, this has meant learning additional skills, including the delegation of tasks to other members of

the team, coordinating their activities, and teaching and management. The new South African health act of 1977 will enable doctors to develop along these lines by making closer liaison between hospitals and community-based services possible. These innovative trends will require different approaches to health facilities construction and the allocation of available finances. (DP-E)

- 5240 Molina, G., Morales, E., Ossandón, J.** *Incorporación de las ciencias sociales al campo de la salud en Chile. (Introduction of social sciences to the health field in Chile).* Revista Cubana de Administración de Salud (Havana), 4(4), Oct-Dec 1978, 305-316. Span. 24 refs.

While the potential contribution of the social sciences to the health field has long been recognized in Chile, medical education presents certain structural characteristics that inhibit easy and productive interaction between the health and social sciences. This paper discusses the role of the social sciences in medicine and examines attempts to integrate social science content within the medical curriculum during three stages of the Chilean social process: 1964-1969, 1970-1971, and 1972-1973. (HC)

- 5241 Torres Portugal, M.** *Primer seminario nacional sobre enseñanza de la medicina preventiva en los programas académicos de medicina del Perú; resumen del informe del seminario. (First national seminar on the teaching of preventive medicine in Peru's academic medical programmes; summary of the seminar report).* Educación Médica y Salud (Washington, D.C.), 9(2), 1975, 196-210. Span. Primer Seminario Nacional sobre Enseñanza de la Medicina Preventiva en los Programas Académicos de Medicina del Perú, Lima, Peru, 27 Nov-1 Dec 1974.

At a conference in Lima in 1974, representatives from five Peruvian universities, the Ministry of Health, PAHO/WHO, and the *Asociación Peruana de Programas Académicos de Medicina Humana* met to discuss these themes: the concept of preventive medicine within medical education, curriculum structure, teaching methodology, and educational resources. This report summarizes the conclusions relevant to each. (HC-L)

IV.1.2 Auxiliary

See also: 4931, 4937, 4938, 4958, 4985, 4991, 5079, 5174, 5184, 5192, 5309, 5317, 5328, 5331, 5347, 5358, 5360, 5363, 5364, 5365, 5366, 5391, 5402

- 5242 Afghanistan, Ministry of Public Health, Department of Basic Health Services.** *Afghanistan, Ministry of Public Health, Department of Preventive Medicine. Primary health care in Afghanistan.* Assignment Children (Geneva), 42, Apr-Jun 1978, 129-138. Engl.

International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 Sep 1978.

Due to the great distances involved and the long periods of isolation during the winter, some 75% of Afghani-

stan's rural population have no direct access to the health care system. After an April 1977 survey, the government launched one training programme for village health workers (VHWs) and another for traditional village midwives; a total of 136 are now working in four provinces. Accountable to the village committee of elders, the VHW carries out preventive and health education tasks, identifies malnourished children, and provides curative care, making available simple drugs at a nominal cost. The government is also training female auxiliaries and exploring the possibility of training nomad health workers and midwives. (Modified journal abstract.)

- 5243 Appleton, B.** *Education and legislation affecting ophthalmic medical assistants.* American Academy of Ophthalmology and Otolaryngology (Rochester, Minn.), 83(1), Jan-Feb 1977, 135-139. Engl.

Two types of legislation may cause concern among US ophthalmic medical assistants: laws governing the licensure of certain practitioners and laws dealing with physician's assistants (which specifically preclude their performing many of the actions customarily carried out by ophthalmic medical assistants). Confusion may be avoided if it is remembered that ophthalmic medical assistants do not perform refractions but rather refractometry (the taking of measurements for refractions) and as such cannot be considered practitioners and that ophthalmic medical assistants are not physician's assistants, who sometimes function in a limited but independent way, but rather traditional members of the ophthalmology team over whom the ophthalmologist has complete authority and for whom he takes full responsibility. (HC-L)

- 5244 Arango de Bedoya, Y., Gómez de Martínez, V.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Secretaría de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad control de crecimiento y nutrición en niños menores de 5 años.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for monitoring growth and nutrition in under-fives). Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-7, 1972. 1v.(unpaged). Span.

See also entries 3967, 4194 (volume 6), 4935, 5245, 5250, 5251, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5294, 5295, and 5370.

The health promoter in the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia, is responsible for visiting families in their homes in order to monitor the growth of under-fives, collect data on morbidity, and instruct mothers in the preparation of locally available, nutritious foods. This detailed curriculum presents the objectives, con-

tents, materials, and methods of the training course. (HC-L)

- 5245 Arango de Bedoya, Y., Gómez de Martínez, V.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Secretaría de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad control y tratamiento de diarreas.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for the control and treatment of diarrhea). Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-9, 1972. 1v.(unpaged). Span.

See also entries 3967, 4195 (volume 6), 4935, 5244, 5250, 5251, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5294, 5295, and 5370.

The health promoter in the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia, is responsible for the prevention, detection, and treatment of diarrhea in under-fives through house-to-house visiting. This document presents a detailed curriculum that tabulates the objectives, content, materials, and methods of the training course. (HC-L)

- 5246 Arole, M.** *Village health workers and community involvement in health care delivery in India.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 123-128. Engl.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

For complete document see entry 4937.

The priorities of the Jambhed Comprehensive Rural Health Project, which covers 100 000 people in 62 rural Indian villages, include simple curative care, maternal child health, family planning, control of chronic diseases, and prevention of blindness. A woman volunteer serves as a village health worker (VHW) in each village, which is visited once a week by a health team composed of a nurse and a health auxiliary. The VHW's performance is evaluated. The formation of young farmers' clubs is also encouraged. Appendices include two VHW case studies, the VHW curriculum, and a random sample survey. (DP-E)

- 5247 Black, M.** *Success story.* New Internationalist (Oxford, UK), 71, Jan 1979, 14-15. Engl.

A self-help project involving the training of community health workers in simple curative techniques and preventive medicine has been operating in western Kenya for over 1 year. The project involves no specially-trained facilitators: its two teams consist of a community development worker, a health worker, and a statistical enumerator seconded from and paid by their respective ministries. The community health workers are selected

and paid by their local communities. This paper cites evidence, such as an "epidemic" of latrine building, that the project has taken root, attributing its success to the degree of genuine local involvement in all stages of the decision-making process. (HC-L)

- 5248 Bryant, J.H.** *Agent de santé communautaire; lien entre la collectivité et le système de soins médico-sanitaires. (Community health worker; link between the collectivity and the system of medical and health services).* Développement et Santé (Paris), 18, 1978, 19-23. Fren.

The community health worker has a double, at times contradictory, responsibility both to the community he serves and to the medical system on which he is dependent. Therefore, great care must be taken in the selection and training of community health workers. The administrative roles of the community and the system vary from country to country, from cases where the collectivity chooses its own health workers to cases where these workers are part of a centralized medical system. The influence these different methods have on relations between community health workers and auxiliaries is also discussed and the role of volunteers is considered. (FM)

- 5249 Gachoud, P.** *Auxiliaire volontaire de santé; son recrutement, sa formation et ses tâches dans le contexte socio-culturel et sanitaire de l'Altiplano péruvien. (Volunteer health auxiliary; his selection, training, and role in the sociocultural and health context of the Peruvian highlands).* Geneva, Editions Médecine et Hygiène, 1978. 91p. Engl. Refs.

M.D. thesis no. 3707 presented to the University of Geneva Medical School.

The author studies the recruitment, training, and job responsibilities of volunteer auxiliary health workers in rural Peru. Part 1 describes the sociocultural context of the study and the organization of local health services. Part 2 contains chapters on the history of health workers in the area and the beginning of the present-day programme. A further chapter examines recruitment criteria, job descriptions, care of chronic illnesses, preventive medicine, traditional practitioners, training programmes, teaching methods and texts, and pharmaceutical supplies. The responsibilities and activities of various government and external agencies are evaluated and comparisons made between the Swiss-designed training programme and that proposed by the Peruvian Department of Health. (FM)

- 5250 Gómez de Martínez, V., Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad inmunización en niños menores de 5 años. (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for the immuniza-*

tion of under-fives). Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-8, 1972. 1v.(unpaged). Span.

See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5251, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5294, 5295, and 5370.

The health promoter in the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia, is responsible for visiting all families with under-fives in her area in order to administer immunizations. This curriculum presents in tabular form the objectives, content, materials, and methods of her training course in this area. (HC-L)

- 5251 Gómez de Martínez, V., Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); recursos humanos; descripción de trabajo de la promotora urbana de salud. (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources; urban health promoter's job description).* Cali, Colombia, Universidad del Valle, División de Salud, Documento No. 7, n.d. 7p. Span.

See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5294, 5295, and 5370.

The urban health promoter in Cali, Colombia, is responsible for the preventive aspects of maternal and child health, including pregnancy detection, family planning, control and treatment of diarrhea, nutritional surveillance, etc. This document sets forward the specific tasks that each of these activities involves and the attitudes, abilities, and skills required to fulfil them. (HC-L)

- 5252 Ismail, R.** *Experiment in motivation.* People (London), 5(3), 1978, 7-9. Engl.

Also published in French and Spanish.

In October 1977, India launched a rural health scheme that is based on the deployment of locally-chosen community health workers called *rashaks*. The workers receive a 3-month training course, are provided with a small monthly stipend and free medicines, and dispense basic services and health education to a population segment of 1 000 villagers. They are supervised by multipurpose workers (recycled single-purpose workers) based at the subcentre level. So far, 30 000 such workers have completed the course and another 60 000 will be trained by the end of 1978. This paper discusses the origins and aims of the scheme and some of the problems encountered in its implementation. (HC-L)

- 5253 Kapoor, P., Deodhar, N.S., Yellapurkar, M.V.** *Integration of leprosy control work with general health services as planned in Maharashtra.* Health and Population (New Delhi), 1(1), Jan-Mar 1978, 51-61. Engl.

The current literature on integration of leprosy control with general health services in India is reviewed. In view

of the introduction of the multipurpose workers scheme and the experience gained in a pilot project, the authors feel that the time has come for integrating leprosy services. Multipurpose workers are being introduced into the leprosy control programme in a manner that ensures adequate supervision by the present leprosy control staff during the training period and for 1 year afterward to smoothe the transition from unipurpose to integrated services. The leprosy staff will then become multipurpose supervisors. An appendix contains the leprosy training curriculum. (DP-E)

- 5254 Mittal, B.N., Oberoi, Y.P.** *Role of health workers in the rural context.* Nursing Journal of India (New Delhi), 69(7), Jul 1978, 153-155. Engl.

The government of India has undertaken a programme to train 1 community health worker (CHW) for every 1 000 rural people. Local villages select candidates aged less than 30 years and with at least 6 years of education who then receive 3 months training at a primary health centre. Although CHWs are expected to continue their normal occupations, in their spare time they provide first aid, referral services, and especially health education, for which they are paid Rs. 600 annually. It is hoped that the CHWs' understanding of local people and customs will contribute to their success. (DP-E)

- 5255 Monekosso, G.L.** *Training of personnel for rural health services in tropical Africa.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 81-100. Engl.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

For complete document see entry 4937.

With the exception of traditional practitioners, there are 9 categories of health workers identified in tropical Africa. Health manpower needs based on the organization and administration of district health services are outlined and a training scheme for health team members in multidisciplinary health science centres is discussed. The curricula for the health technician and physician training programmes are outlined and the possibilities of adapting these programmes for training other health personnel are examined. Tables cover the administrative hierarchy of health services in a tropical African country, the organization of technical units for integrated training of health team members and the university centre for health sciences, personnel training, and a model of a community hospital unit. (DP-E)

- 5256 Nutting, P.A., Tirador, D.F., Pambrun, A.M.** *Approach to utilizing health auxiliaries in direct patient care.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(4), 1978, 283-295. Engl. 17 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 1979.

A methodology for defining the health auxiliary's role, specific tasks, and relationship to the rest of the health

system is described. Auxiliary training then focuses on these tasks and protocols; provisions are also made for auxiliary supervision and programme evaluation. This methodology has been tested within the US Indian Health Service for 4 years. Results to date indicate a high degree of compliance with care standards, success in shifting some of the workload from the physician to the auxiliary, and improvement in public access to health care. (Modified journal abstract.)

- 5257 Rahnema, H.E.** *Role of frontline health workers.* WHO Chronicle (Geneva), 29(1), Jan 1975, 6-9. Engl.

Also published in French, Russian, and Spanish. This paper discusses the selection, training, functions, and supervision of front-line community health workers in the provision of health care to a developing rural population in Iran. The type of health infrastructure required to support them is described. (HC-L)

- 5258 Saksena, D.N.** *Health care and education for rural people: an Indian experiment.* International Journal of Health Education (Geneva), 21(4), Oct-Dec 1978, 258-266. Engl.

In 1977, the Indian government instituted a country-wide rural health scheme to provide one part-time community health worker (CHW) for every 1 000 rural inhabitants. Rural villages select trainees of either sex aged less than 30 years for a 3-month course that concentrates on malaria, smallpox, communicable diseases, environmental sanitation and hygiene, immunization, family planning, maternal child health, nutrition, first aid, etc. In this study, 83 CHW trainees were interviewed in order to study selection procedures, sociodemographic profiles, attitudes toward health work, and reactions to remuneration and the medicine kit. The results are discussed and presented as statistical data. (DP-E)

- 5259 Salubritas, Washington, D.C.** *Health auxiliaries: 3 experiences.* Salubritas (Washington, D.C.), 2(4), Oct 1978, 1-3. Engl.

Also published in French and Spanish.

The utilization and supervision of three types of auxiliary health workers are examined. Rural health promoters in Guatemala have been organized to provide curative and preventive services to isolated rural people, taking on major responsibilities in programme supervision, training, and direction. In rural areas north of Accra, Ghana, the multipurpose health education assistant (HEA) carries out a comprehensive health and family planning programme. At Koje Island near Korea's southern coast, village health aides (VHAs), teenage girls with 9 months training and the aid of an extremely useful home visiting guide, conduct effective home visits. (AF)

- 5260 Wale, S.M.** *Development of basic health workers in the Philippines.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society

for Health and Human Values, 1978, 197-216. Engl. 9 refs.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

For complete document see entry 4937.

The Philippine government has developed a model of *barrio* or community health care founded on the *barangay* health aide (BHA). The model's essential features are continuous on-the-job training, community support for the BHA, and cooperation with the government health worker (a registered midwife). The BHA is at least 18 years old, female, preferably married, literate in English, and a local resident. The need to work with BHAs has led to more community health orientation in physician education. Appendices cover a list of basic health services, job descriptions of different levels of health workers, a BHA training course, and a BHA job description. (DP-E)

IV.2 Nursing Personnel

IV.2.1 Professional

See also: 4929, 4930, 4937, 5309, 5312, 5326, 5339, 5356, 5361, 5368, 5369, 5371, 5373, 5378.

- 5261 Allman-Burke, G.** *Community care in the Caribbean*. World Health (Geneva), Dec 1978, 10-13. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

The community health nurse is making a major contribution to the delivery of health care in the Caribbean. She provides care in a variety of settings and attends to the needs of all segments of the population. This disseminator of vital health information develops warm and friendly relations with her patients and often travels long distances to reach them. Her focus of care is on individuals, families, and the community at large. She is available, accessible, and acceptable. As a trusted health worker, she is able to motivate the community to participate in plans for meeting its own health needs. (DP-E)

- 5262 Bachelor, M., Poh, L.H.** *Home nursing*. Nursing Journal of Singapore (Singapore), 19(1), Jul 1979, 9-11. Engl.

Founded in 1976 by Singapore's Minister for Health, the Home Nursing Foundation provides nursing care to the aged, disabled, and chronically ill in their own homes. The nurse is expected to: work independently in a new environment; have initiative, compassion, understanding, and tact; be highly experienced in the field of nursing; be capable of the rehabilitation of the patient, education of the family in health care, and care of the terminally ill; and be able to manage both patients and relatives in their own homes and provide physical, psychological, social and environmental support to both the patient and the family. (AF)

- 5263 Bahl, A.** *Nurse and the people's health*. Nursing Journal of India (New Delhi), 69(7), Jul 1978, 154-155. Engl.

The present-day nurse in India holds a significant position in the community as well as in the health profession. As a member of the health team, she gives comprehensive health services that involve the health and welfare of the family in the rural community, midwifery, nursing care, maternal and child health nursing, family planning, school health, pediatric nursing, nutrition, sanitation, etc. Her training should be reorganized to include an extensive course on community health and supervision so that she will be better able to understand the needs of the community and the capabilities of the people. (AF)

- 5264 Bailey, V., Barton, E.** *Nursing in Africa*. World Health (Geneva), Dec 1978, 8-9. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Nurses are often the key health providers, sometimes with traditional healers and midwives, in rural areas of Africa not reached by organized health services. In Botswana, for example, nurses are not only the major contributors to the development of hospitals, maternal child health services, and peripheral health services but also vital participants in mental health services, general health clinics, family planning, health manpower training, and health and nutrition education programmes, in particular Botswana's national nutrition surveillance system. Nurses are also beginning to play a political and executive role in the health system. (DP-E)

- 5265 Barrow, R.N.** *Present role of the nurse in the delivery of health care*. In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 49-51. Engl. For complete document see entry 4937.

The role of the nurse is changing from that of caring for the patient to being a member of the health team and her future training should reflect this new aspect, encourage her in decision-making, and involve her in the needs and health problems of the community. She should regard other members of the team as equals, help identify problems, assist with the planning and setting of priorities, be a link in the training of community health workers, be able to carry out these activities with the people and not for them, and respect their wishes. (AF)

- 5266 Bergman, R.** *Planning aspects of selected manpower categories; I: nursing personnel*. In Hall, T.L., Mejía, A., eds., *Health Manpower Planning: Principles, Methods, Issues*, Geneva; WHO, 1978, 201-212. Engl. Refs.

For complete document see entry 4936.

Planning for nursing manpower must take into account the expanding role of nurses within the health team and their need for greater career mobility. The recent proliferation of new nursing categories makes standardization imperative. Overlapping with other disciplines is a spe-

cial problem that can best be dealt with by careful planning to emphasize interdisciplinary teaching and involve related professions in determining programmes and policies. Models for estimating nursing personnel requirements based on local conditions are described and their comparative advantages discussed. Ways of reducing personnel losses during and after training are also examined. (FM)

- 5267 Constantino, R.E.** *Primary prevention; a unique role for the nursing profession.* Philippine Journal of Nursing (Manila), 47(2), Apr-Jun 1978, 44-47. Engl. 10 refs.

This paper focuses on the nurse's role in primary prevention, which is defined as lowering the rate of potential of new illness in a community over a certain period of time by counteracting harmful circumstances before they have a chance to cause illness. Specifically, the nurse can: assess a person's past, current, and potential causes of stress; help the person develop new attitudes and patterns of behaviour that decrease his chances of becoming ill; and evaluate support systems to strengthen these lines of defense. A detailed paradigm for synthesizing primary prevention and the nursing process is presented. (DP-E)

- 5268 Durana, I.** *Role of professional nurses in developing countries: three case studies.* In McNeur, R.W., ed., *Changing Roles and Education of Health Care Personnel Worldwide in View of the Increase of Basic Health Services*, Philadelphia, Pa., Society for Health and Human Values, 1978, 55-67. Engl.

Consultation of the Society for Health and Human Values, Bellagio, Italy, 2-7 May 1977.

For complete document see entry 4937.

The role and professional training of nurses in health care systems in developing countries are examined by means of three case studies. Colombia's *Universidad del Valle* nursing school is trying to solve the problem of how to train health professionals at different levels and make education more relevant to national needs. Thailand's Ramathibodi hospital and Zaire's two nurse training programmes are attempts to develop indigenous programmes with less reliance on expatriate personnel. Finally, the author seeks to identify some of the key issues that constitute the agenda for the future of nursing education and practice in the developing world. (DP-E)

- 5269 Garfield, R.** *China's nurses: redefining roles to improve health.* International Journal of Nursing Studies (Oxford, UK), 15(3), 1978, 129-134. Engl. 8 refs.

The author examines the expanded role of nurses in the health care system of the People's Republic of China. Basic training emphasizes practical experience and participation in community health projects. The rigid separation between doctors and nurses is disappearing as the latter assume more responsibility for patient care and take an equal part in hospital administration. The promotion of nurses to doctors is also quite common and requires only an additional 1- or 2-year course. The

paramedical barefoot doctor is another factor in reducing the distinction between medical and nursing categories. Combining both roles, he or she is the major source of health care in rural areas and typifies the restructuring of the hierarchy of health workers in China. (FM)

- 5270 Garfield, R.** *Nursing and health care in China.* Nursing Forum (Chicago, Ill.), 16(3-4), 1977, 329-338. Engl. 11 refs.

An American nurse notes that in the People's Republic of China the difference between physicians and nurses is one of background and knowledge rather than status; physicians regularly perform all the maintenance aspects of patient care normally delegated to nurses in Western health care systems and nurses can diagnose, prescribe, and perform many medical procedures. After 5 years experience, nurses can take an additional 1-2-year course and qualify as physicians, although nursing is still considered a woman's profession. The history of nursing services in China is traced. (DP-E)

- 5271 Gómez de Martínez, V., Arango de Bedoya, Y.** *Universidad del Valle, División de Salud, Calí, Colombia. Calí, Colombia, Secretaria de Salud Municipal. Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); recursos humanos; funciones de la enfermera. (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources; functions of the nurse).* Calí, Colombia, Universidad del Valle, División de Salud, Documento No. 7, n.d. 7p. Span.

See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5294, 5295, and 5370.

Colombia's Programme of Research into Models of Health Services Delivery (PRIMOPS) deploys nurses in three different capacities: offering planning, programming, evaluation, and technical assistance as part of the human resources unit; training, supervising, and evaluating personnel in the field; and ensuring programme coordination at the health centre level. This document explains and describes the functions involved in each of these roles. (HC-L)

- 5272 International Nursing Foundation of Japan, Tokyo.** *Nursing in the world; the needs of individual countries and their programmes.* Tokyo, International Nursing Foundation of Japan, 1977. 359p. Engl.

The International Nursing Foundation of Japan was established in February 1971 to promote international understanding and cooperation in nursing. Since systems of nursing services, professional training, and specialization vary considerably from country to country, the Foundation realized that a thorough understanding of each country's situation was necessary before cooperative activities could be organized. Consequently, a survey was taken in 1975 of the member countries; the results are presented in this book. Where applicable, each country's report covers its social background, basic nursing

education, midwifery training, public health nurses training, and postgraduate and other training. (RMB)

- 5273 Konyama, K.** *Role of paramedical personnels (sic) in ophthalmic services (screeing (sic) clinic) at Ramathibodi Hospital.* Nihon Ganka Gakkai (Tokyo), 82(8), 10 Aug 1978, 546-554. Engl.

Because of a shortage of professional ophthalmic personnel in the eye department of Bangkok's Ramathibodi Hospital (Thailand), a 15-month training programme for ophthalmic technicians was initiated in 1970 with technical and manpower aid from Japan. Trainees included registered nurses, practical nurses, and vocational school graduates. The curriculum is outlined and the role of the technician in the hospital's refraction and ple-orthoptic clinics and in screening clinics held in mobile health units is described. Due to the success of these ophthalmic technicians, plans are being made to expand the programme on a national level. (DP-E)

- 5274 Moody, R.A.** *Neurosurgical nurse practitioner training program; an educational technical note.* Journal of Neurosurgery (Chicago, Ill.), 50(6), Jun 1979, 798-801. Engl.

The author outlines a 12-month programme to train neurosurgical nurse practitioners that was initiated to help alleviate medical staff shortages in the hospital. Objectives of the course were to train graduates to: interview patients and take medical histories; perform physical and neurological examinations; maintain medical records; order and interpret laboratory tests and special procedures, etc.; know the drugs commonly used in neurosurgery, their dosages, side effects, etc.; and assist in the instruction of patients and their families about health problems and the various resources available to them. Presently working only within the hospital wards, the neurosurgical nurse practitioner may be required to screen patients or, with further training, assist at surgery. (AF)

- 5275 Ogundeyin, W.M.** *Role of paediatric nurse clinical specialists in alleviating manpower shortage in paediatric practice.* Courrier (Paris), 28(5), 1978, 461-463. Engl. 8 refs.

This paper discusses the role of the pediatric nurse practitioner within the context of the current trend toward expanding nurses' functions to include those previously performed exclusively by doctors. Because of the lack of facilities and transport and the maldistribution of personnel, developing countries in particular could benefit from a system of primary care units staffed by nurses, who would keep track of local children from birth. The services that the nurse would be expected to provide are listed. New legislation will be required if the nurse is to have the authority to function properly. (DP-E)

- 5276 Oseasohn, R., Schweback, M., Eberle, B., Reid, R.A.** *Primary care by a nurse practitioner in a rural clinic.* American Journal of Nursing (New York), 75(2), Feb 1975, 267-271. Engl.

In 1968, University of New Mexico staff and local citizens devised a health care system for Estancia, New

Mexico (USA), whereby a nurse practitioner with telephone linkage to physicians at the University (located 60 miles away) provided check-ups, birth control services, antenatal and postnatal care, maintenance of the chronically ill, and emergency medical care with the help of a record system designed to facilitate patient care and permit subsequent assessment of the system itself. This paper describes the nurse's previous experience and training, clinic operation, and the methodology and results of an evaluation of her work. (HC-L)

- 5277 Pan American Health Organization, Washington, D.C.** *Role of the nurse in primary health care.* Washington, D.C., Pan American Health Organization, Scientific Publication No. 348, 1977. 14p. Engl. 9 refs.

Seminar on New Dimensions of the Nurse's Role in the Delivery of Primary Health Care, San José, Costa Rica, 27 Oct-3 Nov 1976.

This seminar brought together 19 professional nurses and 17 physicians from 13 Latin American countries to discuss the need to redefine the nurse's role in the delivery of primary health care. This report summarizes the participants' ideas and conclusions regarding the following: the content and focus of primary health care, the nurse's duties and responsibilities in primary health care, measures for validating the nurse's role in primary health care, preparation of the nurse for the new role, and supervision of the nurse in primary health care. (HC-L)

- 5278 Silver, H.K., McAtee, P.R.** *Rural Health Clinic Services Act of 1977.* Nurse Practitioner (Trenton, N.J.), 3(5), Sep-Oct 1977, 30-32. Engl.

The 1977 Rural Health Clinic Services Act (USA) represents a significant milestone in the recognition of the expanded role that nurse practitioners and physician's assistants can assume in the provision of rural health services. Under the new law, they can offer a wide variety of therapeutic and diagnostic services under the supervision of a physician who need only be personally present once every 2 weeks, own their own clinics, be reimbursed by health insurance plans, etc. Licensed nurse practitioners are required to have, in addition to a nursing degree, 12 months of either additional education or on-the-job training. The act itself is appended. (DP-E)

- 5279 Skeet, M.** *Learning to care.* World Health (Geneva), Dec 1978, 14-15. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Throughout the Southeast Asian region, nurses are becoming involved in training and supervising auxiliary staff and village workers participating in community health care. An example of this new approach is the Cilandak (Indonesia) teacher training school, which opened in 1972. During field studies in four villages, nurses and midwives taught the student teachers to identify community groups, promote community participation in planning health care, train health volunteers, improve environmental health, and teach self-care to

local families. Other innovative examples of nursing education and research are described. (DP-E)

- 5280 Smith, P.A.** *Student nurse rural fieldwork in mainland Tanzania.* Journal of Advanced Nursing (Oxford, UK), 3(5), Sep 1978, 437-446. Engl. 10 refs.

After 42 months of conventional training at the Dar-es-Salaam (Tanzania) school of nursing, students spend 8 weeks participating in a community health project designed to acquaint them with the common problems of rural areas. In particular, they study the difficulties of transport and its relation to the planning of rural health services, activities and problems related to the villages, and villagers' attitudes to modern methods of health care. The project is evaluated by reports from the village leaders and questionnaires administered to the students themselves; the students felt that their most valuable contributions to village health were in the fields of primary care, health education, and maternal child health. (DP-E)

- 5281 Taba, A.H.** *Changing image.* World Health (Geneva), Dec 1978, 4-7. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Fifty years ago, most professional nurses in the Middle East were expatriates; today, the vast majority are nationals. Every country has its own schools of nursing and each year 30 000 nurses graduate from the 500 schools scattered throughout the region. Due to cultural restrictions imposed on women, many of these nurses are men, although male nurses are often forbidden by custom to treat women patients. The author discusses some of the cultural changes that have allowed women to enter the nursing profession, with emphasis on appropriate training programmes and the need for Arabic teaching materials. Nurses in the Middle East are also becoming less regimented and more inquiring; for example, in Somalia, an investigation carried out by nurses revealed that more than 50% of infant deaths were caused by neonatal tetanus. (DP-E)

- 5282 Ward, J.M.** *Thoughts on the use of nurse practitioners in general practice.* Central African Journal of Medicine (Salisbury), 76(3), 218-220. Engl. 10 refs.

With the advent of black majority rule in Rhodesia, the author foresees great increases in the workloads of general practitioners as more people become eligible for coverage by medical aid societies. He suggests that nurse practitioners can play an important role in coping with the demand for qualified medical personnel. As co-practitioners, they would examine patients and make final decisions on their treatment. Previous studies have shown that patients readily accept the expanded role of nurses. Responsibilities of pharmacists could also be increased to give them more input into fitting prescriptions to the disease and the patient. In order to have sufficient personnel when needed, planning must begin now for all aspects of training and utilizing nurse practitioners. (FM)

- 5283 World Health, Geneva.** *Red Cross nursing: born on the battlefield.* World Health (Geneva), Dec 1978, 29. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

At an international conference in Geneva in October 1863, the Red Cross was founded. The organization now has nearly two and a half million members in 125 countries and, in addition to emergency health services in times of disaster, it offers, through the "Health in the Home" programme, information on parenthood, nutrition, and elementary nursing. Most training is provided by nurses, who also participate in social welfare and first aid programmes. Thanks to this training, the Red Cross has, all over the world, a network of accessible, acceptable, and well-motivated primary level health workers. (DP-E)

IV.2.2 Auxiliary

See also: 5266.

- 5284 Arango de Bedoya, Y., Gómez de Martínez, V.** Universidad del Valle, División de Salud, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad control prenatal.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for prenatal care). Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-2, 1973. 1v.(unpaged). Span. See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5271, 5285, 5266, 5267, 5268, 5291, 5293, 5294, 5295, and 5370.

In tabular form, this document presents a detailed curriculum for training nurse auxiliaries in domiciliary prenatal care. The subject matter is broken down into activities and each activity is defined in terms of its tasks, instructional objectives, instructional content, teaching method, and evaluation. The curriculum is part of the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia. (HC-L)

- 5285 Arango de Bedoya, Y., Orrego, F.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad control señoras en planificación familiar.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for monitoring women family planning users). Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-6, n.d. 1v.(unpaged). Span.

See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5271, 5284, 5286, 5287, 5288, 5291, 5293, 5294, 5295, and 5370.

The nurse auxiliary in the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia, is responsible for taking cervical smears for the early detection of cancer and giving family planning advice. This detailed curriculum presents in tabular form the objectives, content, materials, and methods of her training course. (HC-L)

- 5286** **Gómez de Martínez, V., Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad control del post-parto. (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for postpartum care).* Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-4, 1972. 1v.(unpaged). Span.
See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5271, 5284, 5285, 5287, 5288, 5291, 5293, 5194, 5295, and 5370.

The nurse auxiliary in the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia, is responsible for visiting women within 48 hours and again within 4 weeks of delivery in order to identify promptly or prevent morbidity in mother and child. This detailed curriculum presents the course objectives and content and describes appropriate methods and materials for teaching it and evaluating the students. (HC-L)

- 5287** **Gómez de Martínez, V., Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad atención en el puesto de salud. (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for delivering care in the health post).* Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-10, 1972. 1v. (unpaged). Span.
See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5271, 5284, 5285, 5286, 5288, 5291, 5293, 5294, 5295, and 5370.

This detailed curriculum presents in tabular form the objectives, content, materials, and methods of a course that was designed to enable nurse auxiliaries to deliver first aid, preventive medicine, and health education in the health post. The course is part of the Programme of

Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia. (HC-L)

- 5288** **Gómez de Martínez, V., Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); recursos humanos; descripción de trabajo de la auxiliar de enfermería. (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources; auxiliary nurse's job description).* Cali, Colombia, Universidad del Valle, División de Salud, Documento No. 7, n.d. 14p. Span.
See also entries 3967, 4194 (volume 6) 4935, 5244, 5245, 5250, 5251, 5271, 5284, 5285, 5286, 5287, 5291, 5293, 5294, 5295, and 5370.

The auxiliary nurse in Cali, Colombia is expected, through home visits, to deliver prenatal and postnatal care, monitor the growth of low-birth-weight babies and severely malnourished children, and collect data on communicable diseases; at the health post, her duties include immunization, first aid, family planning advice and follow-up, and such curative methods as have been delegated to her. This document describes the specific tasks that each of these activities involves and the qualifications, abilities, and skills required to fulfil them. (HC-L)

IV.3 Midwives and Family Planning Workers

IV.3.1 Professional

See also: 5272, 5354, 5373.

- 5289** **Barton, W.L.** *Planning aspects of selected manpower categories; III: family planning personnel.* In Hall, T.L., Mejía, A., eds., *Health Manpower Planning: Principles, Methods, Issues*, Geneva, WHO, 1978, 223-232. Engl.

For complete document see entry 4936.

The author examines the major family planning issues that planners must consider and outlines methods for estimating personnel needs. The increased use of non-physicians is an important aspect affecting planning. The problems of personnel distribution, integration with other health services, multipurpose versus single-purpose auxiliaries, and the use of incentives to increase productivity are also discussed. Methods used to estimate personnel requirements include the manpower:population ratio approach, the needs method based on meeting six basic needs for safe maternal care, and the fertility decline approach based on personnel needs to serve an estimated total of contraceptive users in order to reach a certain demographic target. (FM)

- 5290** **Verderese, M. de L.** *Planning aspects of selected manpower categories; II: midwifery personnel.* In Hall, T.L., Mejía, A., eds., *Health Man-*

power Planning: Principles, Methods, Issues, Geneva, WHO, 1978, 212-222. Engl.

For complete document see entry 4936.

Improving the training and expanding the role of midwives can greatly reduce the number of maternal and infant deaths in developing countries. Standard services should include a number of antenatal visits (depending on the degree of risk involved), qualified delivery care, and at least two postpartum follow-ups. Separate manpower plans are recommended for rural and urban areas. A formula is given for estimating midwifery requirements once an overall plan for maternal child services is established. The advantages of nurse-midwives over midwives are outlined and the increased use of traditional birth attendants is discussed. (FM)

IV.3.2 Auxiliary

See also: 4991, 5242, 5289, 5290, 5317, 5370.

- 5291 Arango de Bedoya, Y., Gómez de Martínez, V.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad detección de mujeres que usan métodos de planificación familiar.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for identifying women using family planning methods). Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-5, 1972. 1v.(unpaged). Span.

See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5271, 5284, 5285, 5286, 5287, 5288, 5293, 5294, 5295, and 5370.

Health promoters deployed within the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia, are responsible for identifying attitudes towards and users of family planning and giving family planning advice. This document presents in tabular form a detailed curriculum of their training course. (HC-L)

- 5292 Brisset, C. Overcoming deprivation and taboo.** People (London), 6(1), 1979, 18-19. Engl.

To combat the annual maternal mortality rate of 6 000-8 000, the government of Mali has initiated a programme to train traditional midwives as primary health workers. So far, midwives have been taught to place the mothers on a clean surface, cut the umbilical cord in an aseptic manner (traditional practice requires that it be treated with a mixture of karite nut butter and mud from a termite heap, which led to a high incidence of neonatal tetanus), and evacuate complicated cases to a rural maternity hospital. Some midwives have also expressed an interest in family planning, although due to lack of follow-up they must rely on traditional methods, and aseptic female circumcision. (DP-E)

- 5293 Gómez de Martínez, V., Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad detección de mujeres embarazadas.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for the identification of pregnant women). Cali, Colombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-1, 1972. 1v.(unpaged). Span.
- See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5294, 5295, and 5370.

The health promoter in the Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia is responsible for identifying all expectant mothers in her area and passing on this information to the nurse auxiliary. This curriculum presents in tabular form the objectives, content, materials, and methods of her training course in this area. (HC-L)

- 5294 Gómez de Martínez, V., Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); recursos humanos; descripción del trabajo de la comadrona.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources; traditional midwife's job description). Cali, Colombia, Universidad del Valle, División de Salud, Documento No. 7, n.d. 7p. Span.

See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5295, and 5370.

In Cali, Colombia, traditional midwives who have completed a training course and are registered with the local health centre may deliver prenatal care and attend normal deliveries within a specified locality. This document sets forward the rights and regulations governing the practice of the midwife, the specific tasks she is allowed to perform, and the knowledge, skills, and equipment required to fulfil them. (HC-L)

- 5295 Gómez de Martínez, V., Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Departamento de Medicina Social, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); unidad de recursos humanos; modelo de adiestramiento para la actividad atención del parto en casa por comadrona.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources unit; training model for traditional midwives in domiciliary delivery). Cali, Co-

lombia, Universidad del Valle, División de Salud, Departamento de Medicina Social, Documento 7-3, n.d. 1v.(unpaged). Span.

See also entries 3967, 4194 (volume 8), 4935, 5244, 5245, 5250, 5241, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5294, and 5370.

Traditional birth attendants are given additional training in prenatal care, domiciliary delivery, and care of the newborn as part of the Programme of Research into Models of Health Care Delivery (PRIMOPS), Cali, Colombia. This document presents the course curriculum and defines the subject matter in terms of its component tasks, instructional objectives, instructional content, teaching method, and evaluation. (HC-L)

- 5296 WHO, Geneva.** *Traditional birth attendants: a field guide to their training, evaluation, and articulation with health services.* Geneva, WHO, Offset Publication No. 44, 1979. 109p. Engl.

This WHO publication, part of a series intended for health administrators and planners, aims to provide a systematic framework for the planning, implementation, and evaluation of nation-wide programmes for the training and utilization of traditional birth attendants (TBAs) for work in maternal child health and family planning. These guidelines can also be adapted to smaller-scale programmes. Separate sections deal with an overview of programme planning and development, formulation and promotion of basic policies, information gathering for programme development, planning and development of the training programme, evaluation of the training programme, articulation of the TBA's activities within the organized health system, and programme evaluation. Notes, references, and figures are appended. (DP-E)

IV.4 Dental Personnel

IV.4.1 Professional

- 5297 Barmes, D.E.** *Planning aspects of selected manpower categories; IV: dental personnel.* In Hall, T.L., Mejia, A., eds., *Health Manpower Planning: Principles, Methods, Issues*, Geneva, WHO, 1978, 232-245. Engl.

For complete document see entry 4936.

The different categories of dental health personnel include professionals, operating auxiliaries such as dental nurses and hygienists, and non-operating auxiliaries such as dental technicians and assistants. Estimating manpower needs must take into account differences in demand for and use of the various categories and types of dental services. An integrated oral health programme consists of three direct service components (prevention, emergency services, and systematic services to target groups) and two indirect components (manpower production and research/evaluation). (FM)

IV.4.2 Auxiliary

See also: 4931, 5297.

- 5298 Clappison, R.A.** *Auxiliaries in mutation.* Oral Health (Don Mills, Ont.), 65(1), Jan 1975, 11-12. Engl.

A Canadian dentist points out that expanded duties for dental assistants are being proposed at the same time as the country's preventive programmes are foundering for lack of money to train dental hygienists in sufficient numbers. He therefore suggests that the training of both be incorporated into a vertical programme whereby the 1st level of auxiliary (basic dental assistant, for example) could, with minimal duplication of course content and loss of time, work her way up to the 2nd and 3rd levels to become a dental hygienist and a specialist in orthodontics or oral surgery, respectively. Some considerations regarding fee schedules for auxiliaries are mentioned. (HC-L)

- 5299 Gereda Taracena, R.** *Promotores rurales en salud oral: breve informe. (Oral health promoters: brief report).* Revista Centroamericana de Ciencias de la Salud (San José), 2(3), Jan-Apr 1976, 181-185. Span. 10 refs.

Since 1969, Guatemala has been training oral health promoters for deployment in a number of rural areas. The promoters are individuals selected by and trained and deployed in their own communities; their level of skills is continuously upgraded by means of short in-service courses, usually three per year. Alone, they administer first aid and apply preventive and curative procedures for the two most common oral diseases: dental caries and periodontal disease. As part of a team, they conduct oral health campaigns for larger groups, such as the community's child population. Experience has shown the feasibility and appropriateness of this approach to dental health and plans for its extension have been adopted. (HC-L)

IV.5 Laboratory and X-ray Technicians

See also: 4931.

- 5300 Bartholomew, R.K., Goddard, M.J.** *Quality control in laboratory investigations on Schistosoma mansoni on St. Lucia, West Indies: a staff assessment scheme.* Bulletin of the World Health Organization (Geneva), 56(2), 1978, 309-312. Engl.

Also published in French and Spanish.

An evaluation programme devised in St. Lucia, West Indies, permits the assessment of the performance of 10 laboratory workers engaged in stool examinations for the diagnosis of schistosomiasis. Approximately 10% of the negative slides are examined by the supervisor and either confirmed as negatives or declared missed positives. The total number of missed positives each week is plotted on a chart and compared to the acceptable standard. A group chart also shows the laboratory's record over a period of time. It is felt that such charts have a positive

psychological effect and also serve to indicate those employees requiring further training or closer supervision. (FM)

IV.6 Environmental Health Workers

- 5301 Etienne, G.** *Planning aspects of selected manpower categories; V: environmental health personnel.* In Hall, T.L., Mejía, A., eds., *Health Manpower Planning: Principles, Methods, Issues*, Geneva, WHO, 1978, 245-253. Engl. Refs.
For complete document see entry 4936.

Despite increased recognition of the importance of environmental health, no manpower planning for a complete, country-wide programme in this area has ever been undertaken. The planner must recognize the diversity of tasks performed by sanitary personnel and emphasize a team approach utilizing engineers, public health officers, scientists, and technicians. Broad classifications of professional and auxiliary environmental health personnel are given and the role of the professional outlined. The manpower:population ratio is the major method used to estimate personnel requirements in this field. Recent studies are described that provide guidelines for determining a country's need for environmental health facilities and manpower. (FM)

IV.8 Health Educators

- 5302 Abelin, T., Aeschlimann, K., Hodler, F., Dauwalder, H., Meli, B.** *Gesundheitserziehung durch den Lehrer: neue Entwicklungen im Kanton Bern. (Health education through the school teacher; recent developments in the canton of Berne).* Sozial- und Präventivmedizin (Zurich, Switzerland), 22(6), 1977, 316-320. German.

In the canton of Berne, Switzerland, a concept of school health education is being developed in which the individual teacher assumes the principal role. Teaching goals are being formulated, sociocultural conditions considered, and, based on these, age-specific lesson plans and exercises developed. At the same time, a general reform of teacher training is underway to define main ideas, goals, and instructional content for teacher training in human biology and health. Thus, future teachers will be prepared to include health education in their teaching skills and cope with disabled children who are being integrated into normal classes. (Modified journal abstract.)

- 5303 Awad, M.A., Edström, K., Katz, F.** *Sudan: teacher training gets out of the rut.* World Health Forum (Geneva), 1(1-2), 1980, 45-51. Engl.

An innovative programme for training the teachers of health visitors, village midwives, and community health workers began in 1978 at Wad Medani, Sudan. During the 8-week course, students were given the opportunity to live in a rural village and identify its health needs, help the villagers to develop their own health promoting activ-

ities, gain teaching experience by training village volunteers and their fellow students, and make their own teaching materials for present and future use. This paper discusses the philosophy behind the programme, its special features, and its impact on the 1st group of student and village participants. (HC-L)

- 5304 Gardner, M.D.** *Health education presenters-an experiment in health education.* Health Bulletin (Edinburgh), 36(2), 1978, 72-78. Engl. 12 refs.

From October 1976-May 1977, a scheme involving the training of newly-qualified teachers as health education presenters was tested in 89 primary schools in Lanarkshire County, Scotland. This paper discusses the organization of the scheme, the training and performance of its 18 presenters, and the results of a questionnaire that was administered to the head teachers of the participating schools. While the results of the questionnaire were generally favorable, a longer term solution, consisting of incorporating health education into the regular teacher training curriculum, is recommended. (HC-L)

IV.9 Teaching Aids

IV.9.1 Health Care, Nutrition, and Disease Control

- 5305 Aarons, A., Hawes, H., Gayton, J.** *Institute of Child Health, CHILD-to-child Programme, London. CHILD-to-child.* London, Macmillan, 1979. 104p. Engl.

CHILD-to-child is an international programme for teaching and encouraging schoolchildren to concern themselves with the health of younger siblings and children in their communities. This book of ideas includes simple preventive and curative activities appropriate to the local situation that can be demonstrated and taught to the children in school for them to pass on within the family in the village or urban environment. It is addressed primarily to teachers, health workers, and parents, but its simple presentation and numerous illustrations make it attractive and interesting for older children, for whom, as teachers of younger children, the programme is designed. (RMB)

- 5306 Abrahamsson, L., Velarde, N.** *Food systems in developing countries.* Food and Nutrition (Canberra, Australia), 34(3), 1977, 132-140. Engl. 10 refs.

The authors discuss the systems that are used in various countries to classify foods into nutritional groups. They maintain that there are at least five weak points in the food grouping systems of many developing countries: too little importance is given to staple foods; too much emphasis is placed on milk, meat, and other animal products; the need to mix supplementary protein sources is not sufficiently stressed; the need for concentrated energy sources is not emphasized; and nutrition education

is difficult in cultures where there is a wide socioeconomic gap between rich and poor. An alternative system, the food square (based on staple foods and protein, vitamin and mineral, and energy supplements), is presented and explained and an example of this system suitable for use in Zaire is given. (DP-E)

- 5307 Anderson, C.L., Morton, R.F., Green, L.W.** *Community health. 3 edition.* St. Louis, Mo., C.V. Mosby, 1978. 374p. Engl. Refs.

This textbook for community health personnel is divided into five parts: an overview of community health, promoting community health (maternal child health, geriatrics, mental health, etc.), preventing disorders and disabilities (communicable disease control, safety in the community health programme, compulsive behaviour), environmental health (water supply, waste disposal, housing, food hygiene, etc.), and health services at all levels. Each chapter is followed by one list of questions and exercises and another of references. There are an alphabetical index and numerous illustrations. Statistical data are included. (DP-E)

- 5308 Antal, G.M., Causse, G.Y.** *Méthodes de laboratoire utilisables pour le dépistage et la surveillance des maladies à transmission sexuelle. (Laboratory methods used for the screening and the control of sexually transmitted diseases).* Revue d'Epidémiologie et de Santé Publique (Paris), 25(4), 1977, 315-334. Fren. 90 refs.

This review of methods currently used by laboratories in screening for venereal diseases is intended as a guide for physicians and bacteriologists to the relative merits, in terms of reliability and sensitivity, of techniques related to the following: collection sites, transport of specimens, choice of transport media, serological test for syphilis screening, and diagnostic methods for urethritis or non-gonococcal vaginitis. Six tables with translated (English) titles summarize this information and the appropriate level of the health services at which each diagnostic service should be offered is indicated. (HC-L)

- 5309 Biddulph, J.** *Child health for health extension officers and nurses in Papua New Guinea. 4 edition.* Konedobu, Papua New Guinea, Department of Public Health, 1976. 209p. Engl.
See also entry 1899 (volume 3).

This training and reference manual for health extension officers and nurses in Papua New Guinea covers child growth and development, nutrition and nutritional disorders, care of the neonate, common childhood diseases, dental health, maternal health, the organization of community health services, school health, immunization, accidents, health education, family planning, and drug dosages for children. Each chapter is copiously illustrated and contains a number of important principles boxed in by thick, eye-catching, black lines. There is an index. (RMB)

- 5310 Brasil, Ministério da Educação e Cultura. Brasil, Ministério da Saúde.** *Saúde, como compreensão de vida; um programa de saúde destinado a professores e alunos de 5a. a 8a. série do 1º grau. (Health, as awareness of life: a health programme for teachers and students in the 5th to 8th series of the first grade).* Rio de Janeiro, Ministério da Educação e Cultura, Programa de Melhoria e Expansão do Ensino (PREMEN), Ministério da Saúde, Divisão Nacional de Educação Sanitária (DWES), n.d. 314p. Portuguese. Refs.

This book sets forward a programme that was developed to help students in Brazil to attain a better understanding of the factors in their environment that may affect their health. The 1st part, an interpretation of health education, is addressed to the teacher and includes advice on teaching methodology and child development, plus a list of resource materials. The 2nd part, covering practical application of the health programme, is intended for the student as well. It comprises three units devoted to nutrition, infectious diseases, and natural defenses and preventive medicine. Numerous attractive illustrations and suggestions for student projects appear throughout. (HC-L)

- 5311 Brasil, Ministério da Saúde.** *Guia para o controle da hanseníase. (Handbook on leprosy control).* Brasília, Ministério da Saúde, Secretaria Nacional de Programas Especiais de Saúde, Divisão Nacional de Dermatologia Sanitária, Oct 1978. 44p. Portuguese.

This handbook presents guidelines for diagnosing, classifying, treating, and controlling the various forms of leprosy. With the help of many coloured photographs, the diagnostic section outlines the steps for conducting physical examinations and taking skin biopsies. A classification scheme, additional photographs, and the Mitsuda test help the leprosy worker determine which manifestation of the disease the patient has. Treatment instructions cover the drugs available, possible reactions, eye complications, and rehabilitation of the hand and foot. Control measures include technical procedures such as health education and surveillance and administrative procedures such as medical records maintenance. Annexes contain an outline of the Ziehl-Gabbet and the Ziehl-Neelsen diagnostic tests and a sample epidemiological surveillance form. (RMB)

- 5312 Brasil, Ministério da Saúde.** *Manual de normas e procedimentos de enfermagem de tipo ambulatorial no controle da hanseníase. (Handbook of standards and procedures for outpatient nursing in the control of leprosy).* Brasília, Ministério da Saúde, Secretaria Nacional de Programas Especiais de Saúde, Divisão Nacional de Dermatologia Sanitária, Jun 1978. 41p. Portuguese.

This manual is intended to determine the number of nurses needed for leprosy control activities in Brazilian health units, define the nature of these activities and their contribution to the national leprosy control programme, and facilitate their incorporation into other health services. Separate sections cover national policy regarding leprosy nursing, outpatient nursing, job descriptions of nurses and auxiliaries, nursing standards,

and nursing activities in health posts, health centres, and specialized treatment centres. Annexes contain notes on leprosy, a list of drugs currently used to treat it, and a list of participants involved in a 1978 seminar on leprosy. (RMB)

- 5313 Brasil, Ministério da Saúde.** *Construções e instalações de serviços de saúde: manual de orientação.* (Health services buildings and facilities: an orientation manual). Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Organização de Serviços de Saúde. 178. 77p. Portuguese.

The introduction to this handbook on the construction of health care facilities examines standards, legal requirements and permits, and project evaluation. Aspects such as the site and areas of exterior and interior circulation are discussed with appropriate illustrations. Detailed drawings present floorplans for various sections of a hospital, such as administrative services, the outpatient department, diagnostic and treatment services, different types of wards, and general services. Floorplans and notes for the construction of a health post and a health centre are also included. (RMB)

- 5314 Brasil, Ministério da Saúde.** *Podemos nos proteger contra o câncer?* (Can we protect ourselves against cancer?) Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Educação em Saúde, Divisão Nacional de Doenças Crônico-Degenerativas, No. 2, 1978. 43p. Portuguese.

This Brazilian health education booklet discusses the physiology of the cell and how normal cells can become cancerous. Recommended preventive measures include giving up cigarette smoking, having regular physical check-ups, and avoiding food additives and overexposure to the sun. A list of warning symptoms is included. (RMB)

- 5315 Brasil, Ministério da Saúde.** *Diretrizes gerais para os programas de saúde nas escolas de 2º grau.* (General guidelines for health programmes in secondary schools). Brasília, Ministério da Saúde, Secretaria Nacional de Ações Básicas de Saúde, Divisão Nacional de Educação em Saúde, No. 1, 1978. 39p. Portuguese. 18 refs.

These guidelines on health education programmes for Brazilian schoolchildren cover concepts, objectives, methodology, programme contents, and evaluation. Examples of themes suitable for adolescents include lessons on epidemiology, parasitic diseases, occupational health, health professions, communicable diseases, public health, school health, and nutrition. Suggestions for combining health topics with other subjects in the high school curriculum are also given. (RMB)

- 5316 Brasil, Ministério da Saúde.** *Hanseníase: prevenção e tratamento das incapacidades físicas, mediante técnicas simples.* (Leprosy: prevention and treatment of physical disabilities by means of simplified procedures). Rio de Janeiro, Min-

istério da Saúde, Divisão Nacional de Dermatologia Sanitária, 1977. 116p. Portuguese.

Instructions for carrying out physiotherapy and constructing simple prostheses are a main feature of this leprosy handbook. Separate sections cover anatomy and physiology, physical examination, pathology, and treatment of the upper and lower limbs and the eyes. Many photographs and drawings are included. There is a brief chapter on health education and the final part of the handbook deals with registering and classifying disabilities. (RMB)

- 5317 Brasil, Ministério da Saúde.** *Manual para Programa de Penetração Rural.* (Manual for the Rural Outreach Programme). Rio de Janeiro, Ministério da Saúde, Secretaria de Saúde Pública, Divisão Nacional de Organização Sanitária, Setor de Enfermagem, 1974. 148p. Portuguese.

Brazil's Ministry of Health has initiated an auxiliary-based rural health programme that aims to provide emergency services and care for the most vulnerable groups. The recruiting, selection, and training of the health workers involved are described and their duties in the areas of antenatal and postpartum care, childbirth, child health, first aid, infectious diseases, and data collection and medical records maintenance are set forth in detail. Instructions are also given for training and supervising traditional birth attendants. Annexes contain sample evaluation forms and evaluation criteria. There are many illustrations. (RMB)

- 5318 Brown, J.E., Brown, R.C.** *Finding the causes of child malnutrition; a community handbook for developing countries.* Atlanta, Ga., Task Force on World Hunger, 1979. 72p. Engl.

This handbook is intended to help community health workers with a minimum of 6 years formal education deal with protein-calorie malnutrition in children from their own areas. The book tells them how to measure community malnutrition, identify community food problems, and decide which problems to attack. Appendices include English-system weight and reference lists and instructions on how to determine a child's birth date and measure arm circumference, weight-for-age, and weight-for-length. Ten steps to follow in choosing a community nutrition plan are outlined on the back cover. (RMB)

- 5319 Browne, S.G.** *Diagnosis and management of early leprosy for medical practitioners.* London, Leprosy Mission, 1979. 35p. Engl.

Topics covered in this handbook include: guidelines on the approach to leprosy; persons at risk from leprosy; common modes of early presentation in the skin (illustrated by means of coloured photographs); clinical and bacteriologic techniques of value in diagnosis; precautions to be taken during examination; management of early leprosy, including problems, complications, and reactions to treatment that may arise; and prevention and prophylaxis. (HC-L)

- 5320 Candish, J.K.** *Medical biochemistry for the tropics*. London, Bailliere Tindall, 1977. 254p. Engl.

This biochemistry textbook was designed to meet the needs of the physician in a tropical developing country. The subject matter is presented in a realistic context, transversing as rapidly as possible the chemistry of body constituents to allow the student to reach metabolism without being overburdened with formulae and structures. Considerable emphasis has been placed on nutritional chemistry and two chapters on the role of biochemistry in diagnosis are included. Each chapter, where applicable, has been divided into three parts: presentation of basic theory, relationship to tropical medicine, and study methods. An index is included. (HC-L)

- 5321 Centre International de l'Enfance, Paris.** *Santé de la famille et de la communauté. (Family and community health)*. Issy-les-Moulineaux, France, Classiques Africains, 1976. 160p. Fren.

This manual is directed at health workers involved in community and family health in developing countries. Chapter 1 covers the influence of the environment in health and the importance of demographic statistics. Chapter 2 discusses maternal health, including prenatal and postpartum care, and family planning. The growth and development of children is covered in chapter 3. Chapter 4 is devoted to food and nutrition, including the nutritive value of certain foods, and the dietary needs of different age groups, while chapter 5 examines the causes and treatment of malnutrition. Chapter 6 describes immunization, methods of vaccination, and reactions. A final chapter analyzes the role of the health team and health centre. (FM)

- 5322 de Ville de Goyet, C., Seaman, J., Geijer, U.** *Management of nutritional emergencies in large populations*. Geneva, WHO, 1978. 98p. Engl.

This guide is intended for use by health personnel responsible for the field management of severe nutritional emergencies; it is expected to be helpful in the preparation of local procedures and guides for the on-site training of relief workers. Its various chapters treat: normal and emergency needs; major deficiency diseases in emergencies; assessment and surveillance of nutritional status; nutrition relief, which includes general food distribution, mass feeding (cooked meals), and supplementary feeding; therapeutic feeding; special foods, including unfamiliar processed foods such as dried milk; communicable disease control; and camp administration, transportation, and food storage. Appendices contain a review of food and nutrition requirements, protein and energy content of some foods used in tropical countries, various anthropometric measurements, random surveys and sampling techniques, and a simple field test for measuring the amount of vitamin A in dried skim milk. (HC-L)

- 5323 Desjardins, C., Desjardins, S.** *Helping the rural African mother to care for her child: a handbook of health education for health workers*. Gulu, Uganda, St. Mary's Hospital, 1977. 133p. Engl.

This health education handbook for maternal child health workers in East Africa is based on the experience of the health team at St. Mary's Hospital, Gulu, Uganda. It covers the general topics of child care and nutrition, including breast-feeding, and offers specific suggestions on the care of the sick child. (DP-E)

- 5324 Dreisbach, R.H.** *Handbook of poisoning: diagnosis and treatment*. 9 edition. Los Altos, Cal., Lange Medical, 1977. 559p. Engl. Refs.

Also published in Polish, Portuguese, and Spanish. The purpose of this handbook is to provide a concise summary of the diagnosis and treatment of clinically important poisons. Other potentially poisonous agents are included in tabular form. The poisons have been organized into industrial, agricultural, household, medicinal, and plant and animal hazards, since this method allows considerable correlation of poisons with types of exposure. Brand names have been freely used and are identified in the index. Each entry consists of a description of the poison, clinical findings, preventive measures if any, treatment, and prognosis. More than 800 recent references have been added to this edition. (RMB)

- 5325 Dupuis, R., Keystone, J., Losos, J., Meltzer, A.** *Travelers to the tropics; guidelines for physicians*. Ottawa, International Development Research Centre, 1978. 36p. Engl.

The aim of these guidelines is to provide some basic information for physicians and health workers dealing with patients who intend to visit or have returned from the tropics. In general, only the most common conditions are mentioned. In addition to preventive measures and immunization, the reader is instructed in the diagnosis and treatment of malaria, fever, diarrhea, amoebiasis, worm infections, eosinophilia, and other tropical and parasitic infections. Appendices cover international immunization requirements (1978), Canadian reference centres for tropical diseases, and recommended reading. An index is included. (DP-E)

- 5326 Ebrahim, G.J.** *Practical mother and child health in developing countries*. London, Macmillan, Macmillan Tropical Community Health Manuals, 1978. 130p. Engl.

See entry 2592 (volume 4) for an earlier edition. This training manual, an expanded version of a previous edition that was based on experience in Tanzania, is intended to introduce community health nurses to the preventive aspects of pediatrics, obstetrics, nutrition, health education, and child development in developing countries. In addition to covering the usual topics (antenatal care, child health clinics, home visiting, etc.), it includes chapters on caring for the low-birth-weight baby, day care centres, problems of urbanization, community participation in the health services, health programme evaluation, clean water, and handicapping and chronic illnesses. (HC-L)

- 5327 Ebrahim, G.J.** *Handbook of tropical paediatrics*. London, Macmillan, Macmillan Tropical Community Health Manuals, 1978. 87p. Engl.

This handbook evolved out of the need for standard regimens of treatment in the pediatric wards of Dar-Es-Salaam; it was further modified to suit the needs of medical officers in regional hospitals, district hospitals, and health centres. It covers: child growth and motor, mental, and social development; average biochemical standards; biochemical tests; haematological data; nutrition and dietetics; water and electrolytes; common emergencies; the newborn; infectious diseases; and drug dosages. Statistical data are included. (HC-L)

- 5328 Echeverri, O., Rubiano, J., Saravia, J.** Universidad del Valle, Centro de Investigaciones Multidisciplinarias en Desarrollo Rural, Cali, Colombia. *Sistema Rural de Servicios de Salud: manual de supervisión. (Rural Health Services System: supervision manual)*. Cali, Colombia, Universidad del Valle, Centro de Investigaciones Multidisciplinarias en Desarrollo Rural, Documento No. D-345-1, 1979. 31p. Span.
Unpublished document.

This manual teaches the supervisors of rural health promoters within Colombia's Rural Health Services System how to formulate a working schedule, prepare and carry out a supervisory visit, utilize the 10 guides to supervision, judge a rural health promoter's performance, and organize meetings for the continuing education of rural health promoters. The 10 guides to supervision; lists of behavioral norms for the tasks that comprise each of the promoter's functions, are included. (HC-L)

- 5329 Feachem, R., McGarry, M., Mara, D. ed(s).** *Water, wastes and health in hot climates*. Sydney, John Wiley and Sons, 1977. 399p. Engl.

This book for public health engineers and those interested in preventive medicine brings together recent ideas and discoveries concerning water supplies and sanitation in the tropics. The need to choose between quality and quantity of water supply on the basis of local disease patterns is stressed. Other topics covered include the economics of water supply in terms of finances and energy expenditure, waste water treatment, microbiology, solid waste disposal, and effluent reuse. (Modified journal abstract.)

- 5330 Fountain, D.** *Enseignez la santé. (Teaching health)*. n.p., n.d. 43p. Fren.

Designed for health educators in developing countries, this handbook begins by discussing the importance of health education, the basic principles of disease transmission, and the key techniques in effective education. The author then demonstrates these methods by presenting several model lessons on human waste disposal, intestinal parasites, construction of sanitary facilities, importance of clean drinking water, malaria, nutrition, cleanliness and hygiene, and behaviour in cases of illness. Each lesson is presented in a simple, straightforward manner, often with illustrations, and organized around the three basic teaching principles: stating the essential information necessary for understanding the problem, presenting the means to solve the problem, and demonstrating the key points of the lesson. (FM)

- 5331 Harnar, R., Cummins, A., Arole, R.S., Arole, M.** *Teaching village health workers: a guide to the process*. New Delhi, Voluntary Health Association of India. 1978. 2v. Engl.

See also entry 3454 (volume 5); audiovisual materials for use with the guide are included but cannot be microfiched.

These two volumes are based on the authors' 4 years experience teaching village health workers (VHWs) in India. The 1st volume contains valuable advice, much of it illustrated by means of drawings and 1st-hand accounts from VHWs, on the role of the VHW in the community, student selection, training content and methodology, etc. The 2nd contains sample lesson plans and curriculum charts, with the stipulation that great flexibility be exercised in adapting these to local circumstances. A packet of sample audiovisual materials with advice on how to make, adapt, and use them is included. (HC-L)

- 5332 Institute of Child Health, London.** *Foundation for Teaching Aids at Low Cost*. London, Institute of Child Health, n.d. 1v.(unpaged). Engl.

This catalogue-cum-order form lists sets of colour slides and other teaching aids available from the Foundation, which sells its products to health workers in developing countries at or below cost. With the sets are scripts in either English or Spanish describing the slides and usually including questions and answers. The slides cover disease control, nutrition, child health, family planning, and some international aid efforts. Also available are kits for mounting slides, a slide tape tutor, and a slide tape projector. (DP-E)

- 5333 Jardin, C., Crosnier, J. Taro, un poisson, une papaye. (Taro, a fish, a papaya)**. Noumeau, New Caledonia, South Pacific Commission, 1975. 476p. Fren.

A teaching manual for nutrition education in the South Pacific, this book covers the basic principles of health and nutrition. Food products are divided into energy sources, constructive materials, and protective materials and the nutritional needs of different age groups are outlined. Section 3 summarizes the nutritive value of individual foods. Section 4 offers advice on choosing the best food value, satisfying protein and vitamin requirements, and meeting the special needs of workers, athletes, pregnant women, and children. The effects of nutrition on public health are studied in section 5 and nutrition-related diseases described. Techniques for preserving food are given and the role of nutrition in economic development is discussed. Statistical data are included. (FM)

- 5334 King, M., King, F., Martodipoero, S.** *Primary child care; a manual for health workers*. Oxford, UK, Oxford University Press, 1978. 315p. Engl.

This WHO-sponsored manual, part of a larger primary care system, contains a selection of the most appropriate technologies for primary child care taken from all over the world. An introductory section covers disease in the child and the community, supplies and equipment, car-

ing for the healthy child, caring for the sick child, and working in a clinic; the 2nd part deals with the problems and treatment of sick children, including those suffering from malnutrition, respiratory difficulties, diarrhea, fever, skin diseases, leprosy, tuberculosis, injuries, etc.; and the 3rd part concerns babies. There are an index and an appendix containing a self-testing case history and sample weight and drug charts. (RMB)

- 5335 Kovner, A.R., Martin, S.P. ed(s).** *Community health and medical care*. New York, Grune and Stratton, 1978. 483p. Engl. Refs.

Primarily a textbook for medical students, this book is intended for use by other health professionals and policy makers as well. It focuses on the delivery of personal medical care within a context of community health. Key elements of the health care system are covered in the chapters on the organization of care, doctors and patients, and chronic and custodial care. The functions of the system are further analyzed in chapters on measurement, manpower, financing, planning, governance, and management and evaluation. A final chapter contains speculations on the future of community health and medical care. A glossary and index are included. (RMB)

- 5336 League of Red Cross Societies, Geneva.** *Guide on community Red Cross work*. Geneva, League of Red Cross Societies, 1974. 34p. Engl. 13 refs.

This guide was prepared to assist national Red Cross societies to participate in the social development of communities in a systematic way. The guide advocates a combined directive and non-directive approach to community work, i.e., one whereby programmes are selected and planned by agencies for the people who are then persuaded to decide on their implementation. The meaning of community work—its definition, aims, scope, methods, etc.—and the role, function, and preparation of community workers are discussed. (HC-L)

- 5337 Lowe, C.R., Lwanga, S.K. ed(s).** *Health statistics; a manual for teachers of medical students*. Oxford, UK, Oxford University Press, 1978. 140p. Engl.

This manual is intended to help teachers of statistics to present the subject in a manner meaningful to the medical student. It describes the ways in which health statistics are used by medical practitioners, suggests what knowledge and skills the student should be taught, presents the basic techniques of effective teaching, and gives examples of precise teaching objectives, a health statistics programme, and evaluation tests. (HC-L)

- 5338 Morley, D.** *Care of babies and young children in the tropics*. London, National Association for Maternal and Child Welfare, 1978. 14p. Engl.

Although this book is particularly intended for British mothers traveling overseas, the author feels that it might be of some value to mothers in developing countries as well. He makes recommendations concerning standards of pediatric care, clothing, catching cold, hats and sun glasses, bedding, and teeth. A table of inoculations is presented and some minor complaints common to the

tropics, as well as parasitic diseases, are discussed. Nutritional topics covered include water and salt, proper food, and the use of local foodstuffs. The dangers of swimming and roadside play are pointed out and a final section examines local customs of infant feeding and mixing with neighbourhood mothers. (DP-E)

- 5339 Murphy, M., Shryock, A.M., Sulewski, J.G.** University of Michigan, Media Library, Towsley Center for Continuing Education, Ann Arbor, Mich. *Nutrition in health care; a workbook*. 2 edition rev. Ann Arbor, Mich., University of Michigan, 1977. 417p. Engl. Refs.

This self-instructional workbook for nursing students is intended for use with the textbook *Normal and Therapeutic Nutrition*, 15th edition. It is divided into five units (adequate nutrition, the life cycle, resistance to change, malnutrition, and nutritional adaptation), each of which is broken down into 1-hour learning modules that contain self-testing questions. A final examination (not included) can be given for academic credit at the student's request. Appendices contain the answers to the self-testing questions, background information and references, exchange lists for meal planning, and a list of abbreviations. There is an index and vitamin and mineral charts are enclosed. (RMB)

- 5340 Primary Care Development Project, Ithaca, N.Y.** *Prescription for primary health care; a community guidebook*. Ithaca, N.Y. Cornell University, Program in Urban and Regional Studies, Jun 1977. 117p. Engl.

This handbook is intended to help health planners and administrators establish and manage a community health programme. Separate sections cover: the organizational phase, including the involvement of the community; the programme development phase, which is illustrated by the case history of a rural southern county programme (USA); and aspects of programme operation, such as personnel, financial and administrative management, clinical policies and procedures, statistics and information, and quality assurance. Appendices contain sample surveys, guidelines, press releases, by-laws, etc. (DP-E)

- 5341 Prior, F.N.** Voluntary Health Association of India, New Delhi. *Manual of anaesthesia for the small hospital*. 2 edition. New Delhi, Voluntary Health Association of India, 1976. 143p. Engl.

Because of the lack of trained anaesthetists in India, this handbook was designed to give practical instructions in basic principles that can be applied in a variety of situations by both medical and non-medical personnel. It refers only to apparatus and drugs that are commonly available in India and, presumably, other developing countries. Separate sections deal with the components of anaesthesia, maintenance of the airway, induction and maintenance of anaesthesia, premedication and intra-operative sedation, local analgesia, patient monitoring, intravenous fluid, and special problems. Appendices cover equipment and drug firms and government import

regulations. There are an index and illustrations and tables are scattered throughout the text. (RMB)

- 5342 Revolutionary Health Committee of Hunan Province, People's Republic of China.** *Barefoot doctor's manual. rev. and enl. edition.* London, Routledge and Kegan Paul, 1978. 372p. Engl. For 1st edition see entry 3332 (volume 5).

The present edition of this manual has been carefully revised to correct technical errors and mistakes in translation found in the Fogarty International Centre version. It has also been expanded to provide necessary indices and to include scientific nomenclature for the herbs and substances listed in the extensive chapter on Chinese medicinal plants. Intended for use by barefoot doctors, the manual attempts to help them improve the level of health care in rural areas by clarifying their understanding of the prevention and treatment of illness, the relationship between disease and symptoms, and the grounds for cooperation between traditional Chinese and Western medicine. (RMB)

- 5343 Saunders, D.J.** *Visual communication handbook; teaching and learning using simple visual materials.* London, United Society for Christian Literature, Lutterworth Press, 1974. 127p. Engl.

The aim of this illustrated manual is to provide teachers and extension workers in developing countries with a clear and convincing explanation of the contribution that audiovisual materials can make to the educational process and a simple guide to the making and use of audiovisual resources from locally available, inexpensive materials and equipment. These resources include paper pictures, sequence pictures, chalkboards, posters and charts, display boards, flannelgraph, demonstrations, tours and visits, objects and specimens, models, drama, puppets, projected still pictures, movie films, and multimedia presentations. Basic instruction in drawing and lettering skills are included. (HC-L)

- 5344 Shah, P.M., Shah, K.P.** *Timely health care of children and mothers.* Bombay, India, Popular Prakashan, 1978. 54p. Engl.

This handbook on maternal child health is intended for Indian community health workers who visit their patients at least once a month. The section on health care for children covers infant feeding, immunization schedules, and treatment of minor illnesses; each condition is listed together with its symptoms and treatment. The section on maternal health deals with antenatal care during the 1st, 2nd, and 3rd trimesters of pregnancy, preventive care during pregnancy, at-risk pregnant women needing special care, delivery, and postpartum problems. The section on care of the newborn includes family planning and gynaecological problems. (DP-E)

- 5345 Toman, K.** *Tuberculosis case-finding and chemotherapy; questions and answers.* Geneva, WHO, 1979. 239p. Engl. Refs.

The object of this book is to present modern knowledge about pulmonary tuberculosis in the form of question and answer. The main thesis of the 1st part, which deals

with case-finding, is that non-specialized staff should concentrate on identifying patients who are discharging tubercle bacilli by means of the inexpensive and easily learned diagnostic technique of direct sputum examination. The section on chemotherapy covers drug actions and patient reactions, drug resistance and toxicity, standard and secondary regimens, and the merits of sanatorium versus domiciliary treatment, etc. The author opposes the general policy of automatically hospitalizing newly diagnosed cases. (DP-E)

- 5346 USA, Department of Health, Education, and Welfare.** *Educating the public about health: a planning guide.* Washington, D.C., Department of Health, Education, and Welfare, Health Planning Methods and Technology Series, No. 6, DHEW Publication No. (HRA) 78-14004, Oct 1977. 114p. Engl. 78 refs.

This guide provides ideas for the planning, implementation, and evaluation of health education programmes for anyone or any agency engaged in health education programme development. Topics covered are: the importance of factors affecting health, health deficiencies, the role and benefits of health education, etc.; the definitions, involvement, and planning framework of policies for planning and for defining problems; and the definitions, standards, and involvement of setting goals, design and implementation of plans, and evaluation of health programmes. A scoreboard, useful as a checklist during a health development programme or as a self-evaluation schedule, is included. (AF)

- 5347 Werner, D.** *Where there is no doctor; a village health care handbook.* Palo Alto, Cal., Hesperian Foundation, Oct 1977. 403p. Engl.

Also published in Spanish as *Donde No Hay Doctor*; other language versions in preparation.

This manual for village health workers, pharmacists, and teachers opens with a brown-paged section of advice and encouragement from the author. Separate chapters cover home cures and popular beliefs (cooperation with traditional practitioners is recommended), sicknesses that are often confused, examinations and treatment of the patient, healing without medicines, right and wrong use of modern medicines and their measurement, antibiotics, injections, first aid, nutrition, preventive medicine, common illnesses, serious illnesses, skin problems, eyes, dental health, the urinary tract and genitals, information for mothers and midwives, family planning, child health, geriatrics, and the medicine kit. The usage, dosage, and precautions for medicines, a glossary, and addresses for teaching materials are listed on green pages, while the yellow pages contain an index. Tear out sheets for making medical reports and dosage instruction for illiterates are included. The manual is illustrated throughout with drawings by the author. (RMB)

- 5348 Wheate, H.W., Pearson, J.M.** *All Africa Leprosy and Rehabilitation Centre, Addis Ababa. Practical guide to the diagnosis and treatment of leprosy in the basic health unit.* Wurzburg, Germany,

German Leprosy Relief Association, 1978. 26p. Engl.

The aim of this booklet is to enable African health personnel, particularly paramedical staff working at village health posts and health centres, to diagnose leprosy accurately, distinguish it from other skin diseases, and initiate treatment before the disease has caused permanent disability; health education activities can also help to encourage patients with skin conditions to seek treatment. Separate chapters deal with diagnosis, testing for loss of sensation to cotton wool touch, examining for enlargement of nerves, effects of nerve damage, taking skin smears, routine treatment with dapsone, special medical treatment, claw hands, anaesthesia of the hands and feet, dry skin and ulcers on the feet, foot drop, and weakness of the eyelids. (DP-E)

5349 WHO, Geneva. *Field guide to the detection and control of xerophthalmia.* Geneva, WHO, 1978. 47p. Engl. Refs.

Xerophthalmia, one of the leading causes of childhood blindness, is associated with malnutrition, especially vitamin A deficiency. This manual discusses the metabolism of vitamin A and the clinical classification and diagnosis of xerophthalmia. An epidemiological chapter contains a series of coloured plates illustrating the major locations and physical characteristics of the disease. Further chapters study the components of an effective control programme and treatment methods. Short-term prevention measures include the distribution of massive-dose capsules of vitamin A and the fortification of staple foods. Longer-term programmes emphasize nutrition education and the promotion of kitchen gardens. (FM)

5350 WHO, Manila. *Workshop on the Development of Education and Information Materials on Family Health: final report.* Manila, WHO, 1973. 83p. Engl.

Workshop on the Development of Education and Information Materials on Family Health, Nuku'alofa, Tonga, 4-18 Oct 1973.

This workshop was designed to: review the methodological, cultural, and technical aspects of the production of family health education and information materials; develop prototype materials and guidelines for their preparation; adapt these materials to the South Pacific and prepare methods for their distribution, dissemination, and utilization; and consider the training of personnel involved in the use of these materials. Appendices include the list of participants, statistical information, and actual examples of the educational and information materials developed at the workshop. (Modified journal abstract.)

5351 Woodruff, A.W., Bell, S. *Synopsis of infectious and tropical diseases. 2 edition.* Bristol, UK, John Wright, 1978. 382 p. Engl.

This handbook of tropical diseases is intended for medical students and physicians in non-tropical countries who may be called upon to treat tourists or businessmen who have contracted these diseases during their travels. It covers: bacterial diseases; protozoan infections; diseases

due to mycoses, metazoan parasites, spirochetes, viruses, and rickettsia; infectious diseases of doubtful aetiology; nutritional and alimentary disorders; anaemias; heat-induced disorders; and miscellaneous diseases. The entry for each disease deals with aetiology, bacteriology, modes of infection, morbid anatomy, symptoms, special features, complications, varieties, relapses, diagnosis, prognosis, prophylaxis, and treatment. An index is included. (RMB)

IV.9.2 Family Planning and Midwifery

See also: 4917, 4918, 4919, 4920, 4921, 4922, 4923.

5352 Brasil, Ministério da Saúde. *Normas para a identificação a controle dos riscos reprodutivo, obstétrico e da infertilidade no Programa de Saúde Materno-infantil.* (Standards for the identification and control of reproductive, obstetric, and infertility risks in the Maternal Child Health Programme). Brasília, Ministério da Saúde, Secretaria Nacional de Programas Especiais de Saúde, Divisão Nacional de Saúde Materno-Infantil, 1978. 32p. Portuguese. Refs.

Permanent and temporary conditions contraindicating pregnancy are listed and some of the factors that can cause female sterility are outlined. A checklist of treatment measures for high-risk women contains the activities to be carried out during pregnancy and the puerperium, before conception, and in the area of fertility control by the staff of health posts, health centres, and hospitals. The training of health manpower is discussed and a sample curriculum presented. The annex contains criteria for the selection of different types of contraceptive techniques and an explanation of traditional (rhythm, condoms, etc.) and hormonal (different varieties of oral contraceptives) methods and intrauterine devices. (RMB)

5353 Ebrahim, G.J. *Care of the newborn in developing countries.* London, Macmillan, Macmillan Tropical Community Health Manuals, 1979. 130p. Engl. 43 refs.

This illustrated training manual, based on the author's experience as a pediatrician in Dar-Es-Salaam, Tanzania, is intended for medical students, auxiliaries, and midwives who will be working in remote areas under conditions of limited resources. It covers these topics: problems of the newborn and perinatal mortality in developing countries, prenatal care and disorders of pregnancy, cerebral birth injury, routine care of the newborn, the normal newborn, major and minor disorders in the newborn, morbidity and mortality in the 1st month of life, and traditional midwifery. Emphasis in training is on local needs, simple diagnostic reasoning, and practical regimens of management and therapy. (HC-L)

5354 Ojo, O.A., Bassey Briggs, E. *Textbook for midwives in the tropics.* London, Edward Arnold, 1976. 441p. Engl.

This clear, comprehensive textbook was compiled to meet the needs of midwives practicing in tropical coun-

tries. It is geared to the sociocultural background and pattern of obstetric behaviour of the African woman and takes into consideration the multitude of intercurrent infections encountered in the developing countries. Considerable emphasis is therefore placed on conditions such as eclampsia, obstructed labour, malaria, anaemia, the haemoglobinopathies, and the diarrhoeal diseases and appropriate information regarding infant feeding, malnutrition, environmental sanitation, and the basic health services is included. (HC-L)

5355 Population Center Foundation, Population Information Division, Manila. *Effective ways to communicate family planning: a manual for outreach workers*. Manila, Population Center Foun-

dation, Population Information Division, 1978. 1v.(various pagings). Engl.

This training manual for family planning workers in the Philippines contains separate sections on identifying opportunities for introducing population and family planning in the *barangay*, breaking through traditional values and beliefs, counteracting rumours and misconceptions about family planning, and handling complaints and contraception side effects and complications. The sections are divided into units, each of which deals with one or more specific problems by presenting a case history, feedback in the form of self-testing questions, and an analysis of the appropriate action. Every unit ends with a list of suggestions for coping with the sort of problems presented. Photographs and drawings are included. (RMB)

V Formal Evaluative Studies

V.1 Health Workers

See also: 5233, 5234, 5258, 5276, 5296, 5300, 5411.

- 5356 Allen, M.** WHO, Geneva. *Evaluation of educational programmes in nursing*. Geneva, WHO, 1977. 67p. Engl. Refs.

This evaluation model for nursing education programmes designed to respond to community needs was developed with WHO assistance and reviewed by medical and nursing schools in various parts of the world. It covers criteria for evaluation, design for evaluation, and programmes of evaluation. Included in annexes are an elaboration of the design, which deals with initial planning, implementation, and long-term outcomes in a community setting, and a framework for analysis. (RMB)

- 5357 Andrus, L.H.** *Paramedical personnel and private practitioners*. Hospital Practice (New York), 3, Dec 1968, 64-72. Engl.

The use of trained paramedical personnel recruited from the community to improve the delivery of health care to the rural poor of Monterrey County, California (USA), is described. During the 1st year of the demonstration project, 47 aides were trained in 14 categories: home health, nursing, social work, health education, history-taking, X-ray, laboratory, physical therapy, medical records, ward clerk, central supply, language, transportation, and computer operation. Case histories illustrate the ways in which the aides have helped to break down barriers that keep the poor from seeking and receiving care. The benefits to established health services are also pointed out. (Modified journal abstract.)

- 5358 Awan, A.K., Ahmed, M. ed(s).** Pakistan, Planning Commission. *Report of the preliminary impact survey of rural health system of northern areas*. Lahore, Pakistan, Institute of Hygiene and Preventive Medicine, 1974. 60p. Engl.

A pilot project in health care delivery was undertaken in three mountainous, sparsely-populated districts of Pakistan. The project involved training and equipping male and female community health workers to provide basic services on a voluntary, part-time basis, supervised only by their local communities. This paper presents the methodology, results, and recommendations of an evaluation of the project that was carried out some 5 months after its inception. Training curricula, equipment lists, and questionnaires used in the evaluation survey are appended. (HC-L)

- 5359 Einhorn, R.F., Trias, M.** *Differences between physicians and nurses in providing family planning services: findings from a Bogota clinic*. Studies in Family Planning (New York), 9(2-3), 1978, 35-38. Engl. Refs.

To aid in determining if the quality of care provided by nurses is comparable to that of physicians, a study at a family planning clinic in Bogotá, Colombia, evaluated the management of family planning clients by physicians and nurses. The study found significant differences between physicians and nurses in the prescription of contraceptives on the client's 1st visit, in prescription of methods to be used temporarily, in deferment of IUD insertions, and in changing of methods for the client. Continuation rates among the physicians' and nurses' clients, however, did not differ significantly and clients of physicians and nurses were equally successful in preventing unwanted pregnancies. Statistical data are included. (Modified journal abstract.)

- 5360 Hasan, K.Z.** *Rural health guards in the northern areas of Pakistan; a preliminary evaluation*. Assignment Children (Geneva), 33, Jan-Mar 1976, 78-87. Engl.

As an exercise in operational research to determine the type of health service best suited to Pakistan's rural areas, a health guard training programme was launched. Selected by their communities, 720 teams of 1 male and 1 female health guard were scheduled to receive 6-8 weeks training. From February 1974-September 1975, training programmes were held in 59 communities and, to date, 70 000 children have received BCG vaccinations and 15 000, two doses each of poliomyelitis and DPT vaccines. A project evaluation has noted the difficulty of locating training personnel and the tendency of health guards to ignore environmental sanitation in favour of curative practices. (DP-E)

- 5361 Holmes, G.C., Livingston, G., Bassett, R.E., Mills, E.** *Nurse clinician productivity using a relative value scale*. Health Services Research (Chicago, Ill.), 12(3), Fall 1977, 269-283. Engl. 14 refs.

The use of relative value units to measure the productivity of nurse clinicians in four Kansas (USA) primary care practices is described. Relative value points and equivalent dollar values assigned to services provided by professionals yielded a different assessment of productivity than that provided by a count of patient visits. The physician-nurse clinician teams studied were only 6% more productive than the physician-nurse teams when productivity was measured by the number of patient visits processed during an 8-hour period but were 26%

more productive in terms of the value of services they produced per day. Statistical data are included. (Modified journal abstract.)

- 5362 Interamerican Training Center in Communication for Population, Panama City.** UNESCO, Paris. *Critical analysis of two models of national training in communication for population and family health programs.* Panama City, Interamerican Training Centre in Communication for Population, 1978. 37p. Engl.

Third Interamerican Training Center in Communication for Population Follow-up Seminar, Panama City, Panama, 11-16 Dec 1978.

This report of the 3rd Interamerican Training Center for Communication in Population (CIACOP) follow-up seminar analyzes two national training programmes in population communication that have similar objectives but different institutional and operational characteristics. One programme is being carried out by a private Chilean agency and the other by Panama's Ministry of Health. Annexes cover the national training needs of Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Mexico, and Peru and list the seminar participants and technical staff. (DP-E)

- 5363 Joshi, C.B., Bhattia, A.K., Sapru, R., Lazarenko, I.A.** *Study of multipurpose health workers scheme in five field practice demonstration areas of Maharashtra.* Health and Population (New Delhi), 1(2), Apr-Jun 1978, 123-143. Engl.

This paper describes the implementation of the Multipurpose Workers Scheme in five field practice areas of Maharashtra state (India), the nature of the home visiting activities carried out by the staff, and the impact the workers had on different programmes within the scheme. Despite problems of training, worker:population ratios, and availability of drugs and supplies, the study reveals an improvement in performance of almost all health programmes after the implementation of the scheme. Statistical data are included. (Modified journal abstract.)

- 5364 Kane, R.L., Olsen, D.M.** University of Utah, College of Medicine, Department of Community and Family Medicine, Salt Lake City, Utah. *Assess the impact of MEDEX physicians assistants on the health care delivery system.* Springfield, Va., National Technical Information Service, Nov 1976. 1v.(various pagings). Engl. Refs. Unpublished document.

An evaluation of the 1st three classes of physician's assistants (medex) who were graduated in Utah, USA, focused on the impact of the medex on the quality of care, costs and productivity, and physician's income. Data collection methods included patient interviews, direct observation, data reporting forms, examination of physicians' income tax returns, and, for comparative purposes, retrieval of insurance records of medex and non-medex doctors. This document describes the evolution of the evaluation method and presents and discusses the study results. Statistical data are included. (HC-L)

- 5365 Meacham, S., Meacham, C., Henkel, M., Harrison, S.** *Building health through community participation and paramedical training.* Singapore, Quaker International Seminars in Southeast Asia, Jul-Aug 1973. 1v.(various pagings). Engl. Quaker International Seminar on Building Health through Community Participation and Paramedical Training, Davao City, Philippines, 22-28 Jul 1973 and Cilandak, Indonesia, 29 Jul-4 Aug 1973.

This seminar report confronts the problem of whether community-based paramedical training is the solution to the unmet health needs in poor, rural, Southeast Asian communities where Western facilities do not exist and most illnesses can be treated early by auxiliaries with minimal training. Two innovative training programmes were visited and studied. The Davao (Philippines) programme is voluntary, based in urban squatter communities, and focused on training community members to meet their own primary health needs. The Cilandak (Indonesia) scheme is governmental, based on a national training centre, and focused on enabling trained paramedical workers to establish effective links with rural communities. A list of the participants, summaries of papers, and a schedule of events are included. (RMB)

- 5366 Robinson, H.A., Thomson, H.W.** *Tri-service physician's assistants programs.* Military Medicine (Washington, D.C.), 142(5), May 1977, 353-356. Engl.

In order to measure the acceptability of physician's assistants (PAs) in the US military, questionnaires were administered to the PAs, their supervising physicians, their battalion commanders, and Army War College faculty and students. Responses indicated that: PAs perceive themselves to be well accepted by patients, physicians, and health workers alike; supervising physicians and battalion commanders have a great deal of confidence in them; and, although many faculty and students in the Army War College were not familiar with the PA programme, those who were were favourable toward it. Problems cited by the PAs were related to rank structure, regulations regarding treatment management, and continuing education. Response to a specialization option was favourable. (HC-L)

- 5367 Sharma, J.K., Kataria, M., Gandhi, H.S.** *Time utilization of medical officers in the CGHS dispensaries.* Health and Population (New Delhi), 1(2), Apr-Jun 1978, 105-116. Engl.

A study of the activities of 23 physicians serving in four dispensaries forming part of India's Central Government Health Scheme indicated that they spent most of their time writing prescriptions and taking patient histories to the neglect of other essential consultative functions. While this may have been due to heavy workloads, the authors feel that the time of these physicians could have been better spent. Statistical data are included. (DP-E)

- 5368 Spitzer, W.O.** *Strategy for evaluation of new health professionals.* John E. Fogarty International Center Series on Teaching Preventive Medicine (Bethesda, Md.), 1, 1975, 83-100. Engl. Refs.

This scientific strategy for the evaluation of new health professionals includes studies of: the need for and potential source of such physician extenders; their safety, efficiency, and acceptability; their effect on the quality and cost of health care; patterns of activity among physicians and physician extenders; and long term surveillance of physician extenders. The strategy is based on studies of the nurse practitioner in Ontario, Canada, but the principles employed are applicable to health professionals anywhere. (HC-L)

- 5369 Steiner-Freud, J.** *Evaluation of training programs for African nursing personnel in Israel; report on visits to Malawi, Ghana, Tanzania, and Ethiopia.* Jerusalem, Hadassah Medical School, Department of Education, Jan 1970. 49p. Engl.

Part of a project on: Evaluation of Courses for Medical Students from Developing Countries. The author visited Malawi, Tanzania, Ghana, and Ethiopia to assess the performance of 36 Africans who had completed a 6-39 month nurses' training programme at the Hadassah Medical School (Jerusalem). She found that of the 36 nurses trained, 25 were working in their profession within their countries of origin, 8 were engaged in postgraduate studies in the UK, and 2 were seeking employment abroad. An appendix contains some data on the nurses and a summary of their responses to the author's interviews and questionnaire. The questionnaires given to the nurses and their superiors are included in the addenda. (RMB)

- 5370 Torres A., L.H.** Universidad del Valle, División de Salud, Cali, Colombia. Cali, Colombia, Secretaria de Salud Municipal. *Programa de Investigación en Modelos de Prestación de Servicios de Salud (PRIMOPS); recursos humanos; evaluación del adiestramiento de comadronas.* (Programme of Research into Models of Health Services Delivery (PRIMOPS); human resources; evaluation of the training of traditional midwives). Cali, Colombia, Universidad del Valle, División de Salud, Documento No. 7, 1972. 1v.(various pagings). Span.

See also entries 3967, 4194 (volume 6), 4935, 5244, 5245, 5250, 5251, 5271, 5284, 5285, 5286, 5287, 5288, 5291, 5293, 5294, and 5295.

The Programme of Research into Models of Health Services Delivery (PRIMOPS), Cali, Colombia, pretests traditional midwives in order to identify specific knowledge, skills, and attitudes that require further development during their training. This document presents the testing materials (a 31-item questionnaire, a skills checklist, and a formula for evaluating personal aptitudes and characteristics) and instructions for their use. (HC-L)

- 5371 Vacek, P., Ashikaga, T.** *Educational program evaluation: the University of Vermont family nurse practitioner program.* Nursing Research (New York), 27(1), Jan-Feb 1978, 36-41. Engl. 12 refs.

Graduates of the family nurse practitioner (FNP) programme at the University of Vermont (USA) were surveyed to determine if they had enlarged their nursing roles after completing the programme. A sample of Vermont nurses served as a control group. Results of a questionnaire used to obtain information about training, functions, and attitudes indicated that FNPs performed activities associated with an expanded nursing role more often than the nurses in the control group; their attitudes were also different. Statistical data are included. (Modified journal abstract.)

- 5372 WHO, Geneva.** *Analysis of health manpower functions: findings in Brazil, Egypt, and Hungary; a WHO research program.* WHO Chronicle (Geneva), 33(1), Jan 1979, 39-44. Engl.

Also published in French, Russian, and Spanish. In 1969, three WHO research teams collected information on the health needs of rural populations served by health teams in Brazil, Egypt, and Hungary, their attitudes concerning health care, and the actual patterns of supply and demand for service. In all three countries, investigators detected substantial problems in manpower utilization in terms of excessive non-productive time, inappropriate allocation of time, or insufficient time to perform tasks according to desirable standards. There seemed to be an overall need for greater efficiency in the organization and management of health personnel and increased production of all levels of personnel for deployment in rural areas. Statistical data are included. (DP-E)

V.2 Organization and Administration

See also: 4999, 5191.

- 5373 Aguilar, F.N.** *New look for rural health.* World Health (Geneva), Dec 1978, 26-28. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish. Some years ago, the Philippines restructured its rural health care delivery system. By identifying the independence and inter-dependence of the services provided, a redefinition of the key roles of the personnel running the rural health units was undertaken. Changes were introduced in work methods and procedures. In order to facilitate the patient's entry into the health system, the midwife became the provider of basic health services; she refers difficult cases to the public health nurse at the 2nd level and the municipal health officer at the 3rd level. The implications of these changes for the public health nurse are discussed and her expanded role is examined. (DP-E)

- 5374 American Public Health Association, Washington, D.C.** *Innovative practices in low-cost health delivery systems in developing countries.* Wash-

ington, D.C., American Public Health Association, n.d. 70p. Engl.

Unpublished document; also available in French and Spanish.

Distributed by the American Public Health Association, this questionnaire is designed to obtain information on the state of current projects in low-cost health care delivery systems in developing countries. Divided into nine sections, the questions cover project descriptions, innovative features, areas of project activity, staff responsibilities, project facilities and outreach activities, relations with other organizations, community involvement, project management, and evaluation techniques. In some cases, sample answers are given to assist in the completion of the questionnaire. (FM)

- 5375 Barnabas, A.P.** *Implementation of family planning programme in India.* Kuala Lumpur, Asian Centre for Development Administration, 1975. 1v.(various pagings). Engl.

Unpublished document.

The implementation of India's family planning programme is examined. The contributions of the context, the history and development of the programme, its organization, available resources, the feed-back system, and the research and training programmes are considered. Appendices cover administrative organization, achievements, and financial resources. Statistical data are included. (RMB)

- 5376 Cano Pérez, G.** *Resultados del programa de control de la tuberculosis en el IMSS. (Results of the IMSS tuberculosis control programme).* Salud Pública de México (Mexico City), 18(5), Sep-Oct 1976, 877-882. Span.

Twenty-third Conference of the International Union Against Tuberculosis, Mexico City, Mexico, Sep 1975.

The *Instituto Mexicano de Seguridad Social* (IMSS) aims to reduce disease and death from tuberculosis by means of a standardized programme of prevention, detection, and therapy. This paper presents and discusses statistical data on the programme's activities for the years 1961-1974. It is noted that the mean number of cases discovered per year among those served by the IMSS was greater than among the population as a whole, presumably as a result of more intensive screening on the part of the IMSS. (HC-L)

- 5377 Cowen, D.L., Culley, G.A., Hochstrasser, D.L., Briscoe, M.E., Sones, G.W.** *Impact of a rural preventive care outreach program on children's health.* American Journal of Public Health (New York), 68(5), May 1978, 471-476. Engl. 21 refs.

A "treatment-control" research design incorporating a modified "tracer disease" methodology for measuring health outcomes has been applied to the evaluation of a rural pediatric outreach preventive health care programme in Appalachia (Kentucky, USA). The primary research objective was to assess the general level of effectiveness of the health services provided by the programme in preventing and/or reducing illness due to

common childhood diseases among children receiving these services, when compared to similar (i.e., "matched") children receiving standard outpatient care but without such outreach services. The research findings indicate that prevalence rates for the selected tracer disease were generally comparable among programme children and their controls. (Modified journal abstract.)

- 5378 Eberle, B.J., Gonzales, L., Mortimer, E.A.** *New manpower model of rural/urban linkage for improved health services.* Springfield, Va., National Technical Information Service, 31 Jan 1974. 48p. Engl.

A 42-month pilot project designed to meet the needs of scattered rural populations was undertaken in Torrance County, New Mexico, USA. The project involved the delivery of health services by a specially-trained nurse practitioner and laboratory-aide/receptionist acting on standing orders and supported by physicians at a medical school 60 miles away. This document describes the training and responsibilities of the nurse practitioner and presents an evaluation of the project in terms of patient satisfaction, quality of care, and fiscal viability. The project has since been used as a model in the training of 20 more nurse practitioners for similar deployment. Statistical data are included. (HC-L)

- 5379 Goss, M.E., Reader, G.G., Ochs, O.S., Mushinski, M.H., Brewin, J.E.** *Evaluation framework for neighborhood health centers: objectives, information requirements, and inventory of research methods for evaluating organized ambulatory health care centers.* Springfield, Va., National Technical Information Service, Jul 1972. 170p. Engl. Refs.

The aim of this report is to provide a systematic and usable framework for evaluating the effects and operation of neighbourhood health centres and other facilities that provide ambulatory care. Part 1 describes objectives, needs, and strategies for evaluation. Part 2 lists, in outline form, the types of information needed for such an evaluation. Part 3 lists, for each item in part 2, detailed empirical indicators, methods of data collection, and literature references to specific forms and procedures available for use in data collection. (Modified author abstract.)

- 5380 Hsu, R.C.** *Political enemy of rural health care in China.* Review of Radical Political Economics (Ann Arbor, Mich.), 9(1), Spring 1977, 134-140. Engl. 14 refs.

The author examines the political issues involved in the health care system of the People's Republic of China. Following a description of the communal organization of the system, he reviews the development of China's cooperative medical services since the 1960s and emphasizes the importance of the political factor in the selection, supervision, and practice of barefoot doctors. He outlines the mechanism of political and administrative leadership in rural health care, showing the close integration of political ideology and health. Party cadres are largely responsible for the supervision of barefoot doc-

tors and all health workers are expected to be involved in political work. He also underlines the contribution improved rural health care has made to the strengthening of the political structure. (FM)

- 5381 Ingle, J.I., Blair, P. ed(s).** W.K. Kellogg Foundation, Battle Creek, Mich. *International dental care delivery systems; issues in dental health policies*. Cambridge, Mass., Ballinger Publishing, 1978. 263p. Engl.

Colloquium on International Dental Care Delivery Systems, Washington, D.C., 5-6 May 1977.

This collection of conference papers contains chapters on dental care delivery in Mexico, Venezuela, Ecuador, Cuba, and the People's Republic of China as well as Europe, New Zealand, Australia, and North America. The participants were concerned with innovative programmes and approaches and new types of dental manpower. The volume opens with lists of tables and figures, a foreword, a preface, and introductory chapters comprising the opening addresses. Appendices include lists of the speakers, moderators, and participants. Many chapters contain statistical data. (RMB)

- 5382 Mahler, H.** *Challenge of health care: fresh approaches*. Assignment Children (Geneva), 33, Jan-Mar 1976, 9-16. Engl.

Since imported Western health care systems have failed to meet the needs of rural populations in developing countries, the author examines some characteristics of successful primary care programmes. These include the use of local health workers, closer links between health and community development, the involvement of all health personnel, community participation, and maximum and flexible utilization of existing resources. Most primary care programmes concentrate on maternal child health, since mothers and children are especially vulnerable groups and mothers and traditional birth attendants can both be trained as health care agents. (DP-E)

- 5383 Nimalasuriya, A., Abdul Gafoor, A.L.** *Preliminary report of an out-patient systems study in Sri Lanka*. Medical Information (London), 3(4), Dec 1978, 327-331. Engl.

Using operational research techniques to increase the efficiency of an outpatient system, the authors studied the distributional pattern of patient arrival times and doctors' service times in the outpatient clinic of the general hospital in Colombo, Sri Lanka. Results showed that the arrival rate is time dependent, with 31% of the patients arriving in the 1st half hour, followed by a 2nd peak in the 3rd half hour. The service time of doctors was greater for new patients than for follow-up cases and generally fitted an Erlangian distribution curve. It is hoped the study will stimulate further research into reducing waiting times and maximizing use of doctor-hours. Statistical data are included. (FM)

- 5384 Riverón Corteguera, R., Valdés Lazo, F., Ríos Massabot, E.** *Mortalidad infantil en Cuba; análisis del programa para su reducción (1970-1976)*. (Infant mortality in Cuba; analysis of the

1970-1976 programme for its reduction). Boletín Médico del Hospital Infantil de México (Mexico City), 35(6), Nov-Dec 1978, 981-992. Span. 16 refs.

A concerted effort to reduce infant mortality was undertaken in Cuba from 1970-1976. The period witnessed increases in the number of consultations per pregnancy, the percentage of institutional deliveries, and the number of consultations for children aged less than 1 year. By 1976, overall infant mortality had declined from 38.7-22.8:1 000 live births—a reduction of 41.5%. Statistical analysis of and steps responsible for this achievement are presented. (HC-L)

- 5385 Rosenfield, P.L., Smith, R.A., Wolman, M.G.** *Development and verification of a schistosomiasis transmission model*. American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(3), 1977, 505-516. Engl. 26 refs.

Development of a model to predict the impact of water resource projects on the transmission of schistosomiasis is described and verified with data from 54 villages in Khuzestan province, Iran. Changes in disease prevalence following construction of an irrigation project are related to the linear extent of the snail habitats and the size of the infected human population. The model is used to compare the costs and effectiveness of alternative disease control measures. Results indicate that a combined control programme is most cost-effective, but further work is needed to determine the optimal combination of controls. (Modified journal abstract.)

- 5386 Schulpen, T.W.** *Integratie van particuliere en regering-medische diensten in Tanzania; I: gezondheidszorg in Tanzania en het proces van integratie*. (Integration of private and state medical services in Tanzania; I: health care in Tanzania and the process of integration). Tijdschrift voor Sociale Geneeskunde (Oegstgeest, Netherlands), 56(4), 1978, 121-126. Dutch.

In Tanzania, the unique cooperation that exists between the health services of the government and those of the private sector, mainly Christian missions, has opened the way to improved and more economical health care in rural areas. Before the new politics of African socialism made this cooperation possible, the church hospitals were hindered by the need to ask for payment for treatment and by a lack of influence in the public health system, while the government hospitals lacked funds, equipment, and qualified staff. By combining forces, the integrated hospitals come closest to the model that is currently recognized as the most suitable for developing nations. Statistical data on finances are included. (Modified journal abstract.)

- 5387 Sudan, Ministry of Health.** *Primary health care programme; eastern, northern, central and western regions of the Sudan, 1977/78-1983/84*. Khartoum, Ministry of Health, 1 May 1976. 153p. Engl.

This report analyzes past achievements and future priorities in the development of health services in the Sudan.

Part 1 describes the main features of the area, presents demographic, economic, and social data, and outlines the organization of the health care system. Part 2 evaluates the progress of the primary health care programme in the areas of health and development, community participation and self-care, health manpower, information systems, and drugs. Part 3 underlines the need for external aid for community health training centres, drugs and supplies, dispensaries, and information systems. Part 4 concludes with overall reviews of priority areas, cost, and the time-frame for implementing the programme. (FM)

- 5388 Tanahashi, T.** *Health service coverage and its evaluation.* Bulletin of the World Health Organization (Geneva), 56(2), 1978, 295-303. Engl.
Also published in French and Spanish.

Health service coverage is considered as a concept expressing the extent of interaction between the service and the people for whom it is intended. To measure coverage, several key stages are identified and a coverage measure is defined for each stage; a set of these measures represents the interaction between the service and the target population. The evaluation of coverage on the basis of these concepts enables management to identify bottlenecks in the operation of the service, analyze the responsible factors, and select effective measures for service development. (Modified journal abstract.)

- 5389 WHO, Geneva.** *Meeting basic health needs in developing countries: alternative approaches.* WHO Chronicle (Geneva), 29(5), May 1975, 168-187. Engl.

Also published in French, Russian, and Spanish. This paper is a condensed report of a joint WHO/UNICEF study of several promising approaches to basic health care delivery: a health insurance scheme (Savar) and a nutrition project (Jurain) in Bangladesh; barefoot doctors in the People's Republic of China; the Cuban national health care system; self-help and rural development in Tanzania; simplified medicine in Venezuela; the House of Health, a hospital-based community development programme, in Ivanjica, Yugoslavia; the comprehensive rural health project, Jamkhed, India; the deployment of village health workers and trained traditional birth attendants in the Department of Maradi, Niger; the use of Ayurvedic medicine in India; and two-way radio communication in the service of health in North Western State, Nigeria. The accomplishments, limitations, and replicability of each approach are discussed. (HC-L)

- 5390 Zainun, B.** *Analytical study of implementation systems of national family planning programme in Indonesia.* Kuala Lumpur, Asian Centre for Development Administration, 1975. 38p. Engl. 15 refs.

This document examines the management problems that reveal the strengths and weaknesses of the methods used to implement the Indonesian family planning programme. Separate chapters cover: policies and strategies, including the national plan; family planning institu-

tions; resources in the form of personnel, finances, technology, and facilities; management techniques, principally the framework for the comprehensive data system and the budget; information and public participation; and training and research. The author's findings are summarized. (RMB)

V.3 Planning

See also: 5256.

- 5391 Centre Calling, New Delhi.** *Rural health scheme completes a year.* Centre Calling (New Delhi), 13(19), Oct 1978, 11-14. Engl.

On October 2, 1977, India's Rural Health Scheme (RHS) was launched in 724 selected primary health centres (PHCs). Evaluations have demonstrated that the scheme appears to be capable of meeting at least the basic health needs of rural areas by training 1 community health worker (CHW) for every 1 000 rural inhabitants; by September 1978, 56 000 CHWs had been trained and deployed. The RHS is to be expanded to 1 067 PHCs in its 2nd year. Recommendations resulting from the evaluations include the formation of health committees in the villages and more community involvement in the selection of CHWs. (DP-E)

- 5392 Golladay, F.L., Koch-Weber, C.K.** *New policies for rural health: institutional, social and financial challenges to large-scale implementation.* In Technologies for Rural Health, London, Royal Society, 1977, 169-178. Engl.
Royal Society Discussion of Technologies for Rural Health, London, UK, 9-10 Dec 1976.

For complete document see entry 5225.

Rural development activities frequently contribute more than isolated health care interventions to improvements in rural health status. In designing, implementing, and operating health components of rural development projects, the most common problems are how to strengthen the managerial capacity of the health administration from the national to the local level, how to execute integrated programmes through decentralized and uncoordinated agencies, how to ensure adequate recurrent cost financing, and how to achieve active involvement of rural communities in government projects. The World Bank's experience with these problems in a number of African, Asian, and Latin American countries is discussed. (Modified journal abstract.)

- 5393 Henderson, D.A.** *Smallpox eradication.* In Technologies for Rural Health, London, Royal Society, 1977, 83-97. Engl. Refs.
Royal Society Discussion of Technologies for Rural Health, London, UK, 9-10 Dec 1976.

For complete document see entry 5225.

A number of key factors in the strategy and execution of WHO's smallpox eradication programme are identified. Most important was the recognition that an effective surveillance mechanism was necessary to guide programme implementation and assess progress. In response to surveillance information and depending on

national health care, social, and cultural patterns, the nature of the programmes in each of the endemic countries developed and changed from year to year. Participation of staff in the existing health structure and of village populations was essential. Other deciding factors included assessment mechanisms for quality control of activities, production of improved vaccines, and better vaccination methods. (DP-E)

- 5394 Livingstone, M., Raczyński, D.** Universidad Católica de Chile, Centro de Estudios de Planificación Nacional, Santiago. *Políticas y programas de salud en Chile, 1964-1973. (Health policies and programmes in Chile, 1964-1973)*. Santiago, Universidad Católica de Chile, Centro de Estudios de Planificación Nacional, Estudios de Planificación, Documento No. 35, Jan 1974. 38p. Span.

This paper discusses, compares, and evaluates two Chilean health plans — the Frei administration's 10-year plan (1966-1975) and the Allende administration's 7-year plan (1970-1976) — in terms of their basic premises, diagnosis of the delivery problem, health services organization and planning, policies, and impact on the health of the population. The last is based on data for the years 1964-1972. (HC-L)

- 5395 Molineaux, L., Dietz, K., Thomas, A.** *Further epidemiological evaluation of a malaria model*. Bulletin of the World Health Organization (Geneva), 56(4), 1978, 565-571. Engl. 8 refs. Also published in French and Spanish.

The malaria model previously fitted to 1-year baseline data from northern Nigeria was tested against data collected from the same area over 3 years and against similar Kenyan data. The test consisted of using the vectorial capacity, calculated from entomological observations, as input in the original model while keeping to the other parameters and of comparing the prevalence of *Plasmodium falciparum* as estimated by the model to that actually observed. There was relatively good agreement and the model is considered epidemiologically satisfactory and fit for use in planning malaria control operations. Statistical data are included. (Modified journal abstract.)

- 5396 WHO, Geneva.** *Health technology relating to primary health care and rural development; report of the Director-General*. Geneva, WHO, Provisional Agenda Item 2.5.15, 12 Apr 1976. 7p. Engl. Twenty-Ninth World Health Assembly, Geneva, Switzerland, 12 Apr 1976. See also entry 5025.

A health delivery system in any country requires a series of "tools" for solving health problems. At present, in many countries, although the nature of health problems is known and methods of treatment and prevention are available, appropriate methods may not be selected. In other countries, such decisions are based on technical grounds alone rather than on complex variables such as cost, effectiveness, safety, etc. This document examines

the problem, defines health technology, and makes a proposal for national and international action with emphasis on district level health services, primary care, and rural development. (Modified journal abstract.)

- 5397 Williams, S.R.** *Advances in health planning methods*. Health Services Research (Chicago, Ill.), 12(1), Spring 1977, 55-58. Engl.

Many of the papers presented at the annual meeting of the American Public Health Association in 1977 were related to issues in health planning. This review summarizes the content of those papers that focused on local-level planning and covered such topics as choosing between new programme alternatives, cost containment methods, and estimating the demand for services. (HC-L)

V.4 Geographical Distribution of Health Services and Workers

- 5398 Camerlain, M.** *Nouveaux axes de l'action médicale et sanitaire dans la Chine en construction. (New directions of medical and public health action in China under construction)*. Union Médicale du Canada (Montreal, Que.), 105(11), Nov 1976, 1638-1641. Fren.

The emergence of the barefoot doctor, the cooperative medical system, and the resettlement of urban doctors in rural areas are the three main health care innovations in the People's Republic of China during the past 25 years. The 1st programme has increased the number of medical personnel in rural areas to 1 500 000, with an additional 3 600 000 health agents and midwives. The cooperative medical system, a form of health insurance at the brigade level, covers medical expenses and transportation costs. Finally, the resettlement of doctors and the emphasis on mobile health teams have also greatly improved the quality of health care available in remote areas. (FM)

- 5399 Colditz, G.A., Elliott, C.J.** *Queensland's rural practitioners: background and motivations*. Medical Journal of Australia (Sydney), 2(2), 15 Jul 1978, 63-66. Engl. 14 refs.

In view of the continuing maldistribution of physicians, this study was undertaken to examine the backgrounds and factors influencing choice of practice location by rural practitioners in Queensland (Australia). Of those doctors in rural practice, 38% had spent more than 10 childhood years in a rural environment. Interest of work and variety of practice were the most consistently designated attractions of rural practice, while the major disadvantages included restricted opportunities for continuing education, difficulty in obtaining locum assistance for holidays and education, and professional isolation. The authors recommend that steps be taken to correct these problems. (Modified journal abstract.)

- 5400 Jayachandran, V., Gladis, J., Hemanalini, E., Mathew, M., Kurup, B.** *Study of factors related to rural job preference among prospective nursing graduates.* Health and Population (New Delhi), 1(1), Jan-Mar 1978, 24-39. Engl.

Of 430 nursing graduates from 10 schools and 5 colleges in India who were surveyed to identify factors related to their preferences for work in urban or rural areas, 70% expressed a preference for urban work. Significant factors related to rural preferences were religious and rural background, type of educational institution (government or non-government), and living in a rural setting during community nursing experience. Reasons for urban preference included living conditions, job availability for spouse, security, school for children, continuing education, job satisfaction, and intellectual stimulation. Statistical data are included. (DP-E)

- 5401 Lewis, C.E., Fein, R., Mechanic, D.** *Right to health; the problem of access to primary medical care.* New York, John Wiley, Health, Medicine and Society: a Wiley-Interscience Series, 1976. 367p. Engl. Refs.

This book discusses the major problems affecting the US public's access to adequate, affordable medical care. The 1st section reviews difficulties related to the provision of health services and suggests a conceptual framework in which the reader can evaluate attempts to improve access to primary medical care. Part 2 examines and evaluates the impact of 11 programmes that were initiated by government and other groups to improve access; these include rural preceptorships, new health practitioners, Medicare, Medicaid, neighbourhood health centres, and health maintenance organizations. The 3rd part draws upon the preceding discussions to suggest some policy options for achieving increased access to primary medical care. (HC-L)

- 5402 Morris, S.B., Smith, D.B.** *Distribution of physician extenders.* Medical Care (Philadelphia, Pa.), 15(12), Dec 1977, 1045-1057. Engl. 14 refs.

A mail survey was conducted of 5 572 physician extenders (PEs) to identify potential study participants in the USA. Analysis of survey results indicated that PEs are distributed disproportionately more often than physicians to primary care practices and low-income, rural areas. However, there are substantial differences among types of PEs with regard to practice location and arrangement. The relationship between these findings and the distribution of other health personnel and innovations is examined. Statistical data are included. (Modified journal abstract.)

- 5403 Mott, P.D., King, S.R., Gavett, J.W.** *Simplified method for approximation of shortages of rural physicians.* Public Health Reports (Rockville, Md.), 92(4), Jul-Aug 1977, 322-325. Engl.

The methodology described provides a simple, inexpensive means of studying physician distribution and assessing the capacity of existing primary care physicians to provide care for a specified number of patients. It includes these steps: analysis of the population and project-

ed population growth, analysis of the physician population and their capacity to provide care, geographic mapping of physician capacity for major centres, and analysis of potential underserved areas. Despite its limitations and the need for more detailed study, this method is useful in alerting planners to problems of under- and over-supply. Statistical data are included. (FM)

- 5404 Scheffler, R.M., Kushman, J.E.** *New health practitioners and rural health care.* American Journal of Agricultural Economics (Lexington, Ky.), 60(4), Nov 1978, 691-694. Engl. 10 refs.

A survey of medex and physician's assistants indicates that these practitioners are locating in or near rural areas to a greater extent than general practitioners or any other type of physician. These practitioners should have an important effect on the distribution of rural health services once problems such as job descriptions and financial arrangements have been settled. Recruitment of persons with rural upbringing can enhance that effect. Medex showed a greater tendency than physician's assistants to go into practices that are solo, rural, and noninstitutional. For many isolated areas, small practices represent the only viable source of care and it is hoped that efforts will be made to attract more new health practitioners to them. (DP-E)

- 5405 Schwarz, M.R.** *Medical education and rural health in the Pacific Northwest and Alaska.* Biosciences Communications (Basel, Switzerland), 4, 1978, 59-66. Engl.

This programme of decentralized medical education (WAMI) aims to help the sparsely-populated US states of Washington, Alaska, Montana, and Idaho overcome problems related to lack of medical education facilities, shortages of primary care physicians, and maldistribution of services. The programme's strategies include offering the 1st year of the medical curriculum in four state universities, increasing the rural content in course work and clinical practice, and promoting exchanges between community clinical units and tertiary facilities in Seattle. So far, the programme has successfully raised recruitment from the region by 67% and increased the numbers of students choosing careers in primary medicine and rural practice. Means of combatting professional isolation and ensuring continuing education for such physicians are discussed. (HC-L)

- 5406 Thomas, I.D., Mascarenhas, A.C.** *Health facilities and population in Tanzania; part one: hospitals in Tanzania and population within given distances of their sites.* Dar-es-Salaam, University of Dar-es-Salaam, Bureau of Resource Assessment and Land Use Planning, Research Paper No. 21-1, Jan 1973. 51p. Engl.

A study was undertaken in Tanzania to determine the manner in which hospitals and health centres are distributed throughout the population. This document illustrates by means of maps and tables the number of people in each region who are near (i.e. within 5-10 km of) a health facility and, more significantly, the number who

are not. A description of the study methodology and a summary of its findings are included. (HC-L)

- 5407 Zeighami, B., Zeighami, E., Mehrabanpour, J., Javidian, I., Ronaghy, H.** *Physician importation-a solution to developing countries' rural health care problems?* American Journal of Public Health (New York), 68(8), Aug 1978, 739-742. Engl.

Iran has recently begun a massive programme to increase the supply of physicians in its rural areas by importing doctors from India, Pakistan, and the Philippines. Results of a questionnaire survey of foreign physicians indicate that their most common reasons for accepting these posts were higher salaries and the desire to emigrate eventually to a Western country. Results of an interview survey with Iranian consumers indicate that residents of rural areas were far more likely to prefer Iranian auxiliaries to non-Iranian physicians. Statistical data are included. (DP-E)

V.5 Financial Aspects

See also: 4915, 4916, 5195, 5385, 5386.

- 5408 Agarwal, A., Tinker, J.** *Drugs and the Third World.* London, International Institute for Environment and Development, Earthscan, Aug 1978. 70p. Engl.

This informal UN drugs strategy, formulated by WHO, UNCTAD, UNICEF, and UNIDO against the opposition of multinational pharmaceutical companies, is part of a new approach to development aimed at increasing production in developing countries through a process of self-reliance. The Third World pharmaceutical policies outlined here cover basic drugs lists, generic rather than brand prescribing, bulk purchasing, local formulation and manufacture, alternative technologies, and traditional medicines. The financial aspects of the drug trade are thoroughly examined. (RMB)

- 5409 Culyer, A.J., Wright, K.G. ed(s).** *Economic aspects of health services.* London, Martin Robertson, York Studies in Economics, 1978. 190p. Engl. Refs.

The aim of this collection of 10 essays is to apply economic analysis to some important problems now facing the British national health service and health services in general. It also contains a review of recent research in health economics. The essays are grouped according to four themes: quality of care, evaluating services, finance, and manpower. Emphasis has been placed on questions facing policy-makers and on the economist's ability to analyze the issues involved in a manner that is helpful to decision-making. The book's language has been kept as free of jargon as possible and technical terms are explained. Statistical data are included. (RMB)

- 5410 Feldman, R., Deitz, D.M., Brooks, E.F.** *Financial viability of rural primary health care centers.* American Journal of Public Health (New York), 68(10), Oct 1978, 981-987. Engl. 16 refs.

Primary health care centres have been proposed to meet

health needs in the rural USA. Some centres become financially self-sufficient, receiving their entire budgets from direct patient or 3rd-party payments; others shut down when external funding is withdrawn. This article describes a study that identifies the correlates of self-sufficiency based on the results of a 1976 survey of 164 rural clinics. Multiple regression analysis shows that the longer a centre has been in operation, the more self-sufficient it will become; hospital control and the provision of laboratory tests increase self-sufficiency while outreach services and non-profit status reduce it. Other variables are also examined. Statistical data are included. (Modified journal abstract.)

- 5411 Greenfield, S., Komaroff, A.L., Pass, T.M., Anderson, H., Nessim, S.** *Efficiency and cost of primary care by nurses and physician assistants.* New England Journal of Medicine (Boston, Mass.), 298(6), 9 Feb 1978, 305-309. Engl. 31 refs.

A California study of 472 patients compared the efficiency and costs of a system in which nurses and physician's assistants used protocols to those of a physician-only nonprotocol system. All patients had one of four common acute complaints: respiratory infection, urinary and vaginal infection, headache, or abdominal pain. In the 1st system, physician time per patient was reduced by 92%, from 11.8-0.9 minutes, and average visit costs, including practitioner time and charges for laboratory tests and medication, were 20% less. The authors conclude that this protocol system saves time and reduces costs. Statistical data are included. (Modified journal abstract.)

- 5412 Gunaratne, V.T.** *Bringing down drug costs: the Sri Lankan example.* World Health Forum (Geneva), 1(1-2), 1980, 117-122. Engl.

The percentage of the health budget spent on drugs tends to be much higher in developing countries than in developed countries, or, 30%-50% for the former as compared to 10%-30% for the latter. This paper examines the role of the multinational drug companies in promoting this exaggerated demand on the part of the developing countries and holds up as an example the case of Sri Lanka which by introducing a rational approach to the procurement, production, supply, and use of pharmaceutical products has reduced its drug costs to 7.5% of the total health expenditure. (HC-L)

- 5413 Kapur, R.L., Isaac, M.** *Inexpensive method for detecting psychosis and epilepsy in the general population.* Lancet (London), 2(8099), 18 Nov 1978, 1089. Engl.

This Indian study assesses the cost-effectiveness of three methods for detecting psychosis and epilepsy (as well as other mental disorders) that can be used by trained auxiliaries. The method recommended involves an interview with one family member aged more than 25 years from every household in a target village based on a "symptoms-in-others" questionnaire. While this method cost 1 073 rupees and was not the least expensive, it is most accurate with respect to adult epilepsy and psy-

chosis and particularly sensitive to juvenile epileptics. It is recommended that the interviewing procedure be incorporated into regular home visits. (DP-E)

- 5414** Rees, P.H., Bagg, L.R., Hansen, D.P., Thuku, J.J. *Medical care in a tropical national reference and teaching hospital; outline study of cost-effectiveness*. British Medical Journal (London), 8 Jul 1978, 102-104. Engl.

During a 28-day prospective audit at the Kenyatta National Teaching Hospital, Nairobi, Kenya, the cost-effectiveness of treatment in three types of medical wards in a large tropical teaching hospital was assessed. Data were collected on patients in the adult observation ward, a general ward, and the intensive care unit. Patients with chronic diseases such as rheumatic heart disease were more expensive to treat than those with acute, curable illnesses such as malaria. It was concluded that the cost of providing treatment could not be reduced without affecting standards of medical care. The expense of running such a hospital might also be justified by its important function as a teaching hospital. (Modified journal abstract.)

- 5415** Rosenblatt, R., Moscovice, I. *Growth and evolution of rural primary care practice; the National Health Service Corps experience in the Northwest*. Medical Care (Philadelphia, Pa.), 16(19), Oct 1978, 819-827. Engl. 8 refs.

The economic growth and development of 12 rural primary care practices established by the National Health Service Corps in the Pacific Northwest (USA) from 1973-1975 are examined. The 12 practices represented four types of rural health care delivery systems based on the size of the service area, the presence and type of hospital within that area, and the number and kinds of practitioners (physicians and/or nurse practitioners). The results indicate that rural practices in the region can approach financial self-sufficiency in 2-3 years and are useful for predicting rates of growth and advising rural communities on alternative health care systems. (Modified journal abstract.)

- 5416** Scheffler, R.M. ed(s). *Research in health economics; a research annual*. Greenwich, Conn., JAI Press, 1979. 401p. Engl.

This is the 1st volume of this annual compilation of USA-oriented research papers in health economics. Topics covered in this volume include planning a national health manpower policy, the productivity of physicians assistants and medex, new developments in the market for rural health care, a disaggregated model of medical speciality choice, retention of medical school graduates, a model of physician location and pricing behaviour, determinants of professional nurses' wages, nurse market policy simulations using an econometric model, and health status maximization and manpower allocation. Many papers contain statistical data. (RMB)

- 5417** Yu, S.H., Yang, J.M., Kim, H.K. *Study of hospital utilization by and the cost of care to patients in a private university hospital in Seoul,*

Republic of Korea, 1955-1974. Konsei Medical Journal (Seoul), 18(2), 1977, 166-189. Engl. Refs.

In an attempt to understand the changing patterns of hospital care utilization and costs, a study was made of the medical and administrative records of 7 798 patients discharged from a private university teaching hospital in Seoul (Korea) in 1960, 1965, 1970, and 1974. The average length of stay decreased from 17.1-10.4 days; mortality also declined, although the main reasons for admission (maternity, infectious diseases, parasitic diseases, etc.) remained the same. Total hospital expenses increased 4.4 times and expenses per patient day increased 6.2 times. Room and treatment costs accounted for 40%, while drugs and injections cost an additional 20%. The highest increase was in the cost of laboratory services, followed by drugs and injections. Statistical data are included. (DP-E)

V.6 Cultural Aspects

See also: 4901.

- 5418** Azad Khan, A.K., Akhtar, S., Mahtab, H. *Treatment of diabetes mellitus with Coccinia indica*. British Medical Journal (London), 280(6220), 12 Apr 1980, 1044. Engl.

This paper reports the findings of a double-blind controlled trial of the leaves of *Coccinia indica*, a wild creeper in Bengal used since ancient times for treating diabetes in the Ayurvedic system of medicine, in the treatment of patients with untreated but uncomplicated maturity-onset diabetes. Out of 16 patients who received *C. indica* tablets, 10 exhibited considerably improved glucose tolerance. (HC-L)

- 5419** Brazelton, T.B. *Implications of infant development among the Mayan Indians of Mexico*. In Leiderman, P.H., Tulkin, S.R., Rosenfeld, A., eds., *Culture and Infancy; Variations in the Human Experience*, London, Academic Press, Child Psychology Series, 1977, 151-187. ENgl. Refs.

For complete document see entry 5430.

To document behavioural differences in neonates and see their interactions with child-rearing practices that have been selected over generations in an isolated culture, a study was conducted from 1966-1969 among the Zinacanteco (descendants of the Maya) Indians of highland Mexico. The study focused on characteristics of the newborn at birth and during the 1st week of life, mother-child interaction in the 1st 9 months, and developmental milestones during the 1st year. The results are discussed and presented as statistical data. Appendix A contains a list of methods for assessing infant states and Appendix B a summary of the apparent differences between Zinacanteco and US infants. (DP-E)

- 5420** Caldwell, J.C., Caldwell, P. *Achieved small family: early fertility transition in an African city*. Studies in Family Planning (New York), 9(1), 1978, 1-18. Engl. Refs.

In an effort to find ways to encourage family planning,

the characteristics of Yoruba women (Nigeria) who deliberately chose to limit the size of their families are examined. Data from surveys carried out in 1973 and 1974-1975 indicate that these women had generally received some secondary education and were married to nonmanual workers, these families differed from the norm in terms of emotional closeness and child-centredness, financial strains were stressed as a major reason for limiting family size, etc. The small families experienced a low level of child mortality that is not explained by their socioeconomic conditions. Statistical data are included. (DP-E)

- 5421 Davis, S., Kunitz, S.J.** *Hospital utilization and elective surgery on the Navajo Indian reservation.* Social Science and Medicine (Oxford, UK), 23(4B), Oct 1978, 263-272. Engl. 44 refs.

A population-based patient origin study was undertaken in 1973 to examine patterns and rates of hospital utilization and elective surgery in the Navajo Indian population of the USA. The study proves that, despite differences in morbidity patterns, differences of utilization within the Navajo population are better explained by access to, rather than need for, care. The study methodology is explained and statistical data are included. (Modified journal abstract.)

- 5422 Dricot, J.M., Dricot-d'Ans, C.** *Influence des transformations socio-économiques sur l'état de nutrition des indiens Machiguenga (Amazonie péruvienne): aspects méthodologiques. (Effect of socioeconomic changes on the nutritional status of Machiguenga Indians (Peruvian Amazon): assessment of method).* Biométrie Humaine (Paris), 12(2-3-4), 1977, 77-89. Fren. Refs.

Anthropometric measurements were taken of men aged 18-59 years in the Amazonian area of Peru. There was little difference in measurements from two villages that had had little contact with civilization; however, skinfold thickness, lean body weight, and percentage fat were significantly less in the 3rd, more civilized village. The isolated groups ate more foods of animal origin and grew more types of food than the other group, where coffee had replaced traditional crops. It was concluded that the four usual measurements needed to be supplemented by other circumference measurements and skinfold thicknesses from the arm, leg, and chest. (Modified journal abstract.)

- 5423 Erny, P.** *Sex education in traditional life in black Africa.* Children in the Tropics (Paris), (112), 1978, 2-43. Engl. Refs.

Separate sections of this special issue devoted to traditional African methods of sex education cover the ideological and social background (religious aspects of procreation, tracing lineage and descent, etc.), the transmission of knowledge, shaping attitudes and emotions (attitudes and morality, clothing, nudity, masturbation, premarital intercourse and pregnancy, aphrodisiacs, etc.), and ritual initiation, including circumcision. The author cautions that new methods and ideas should not be introduced at the cost of destroying the emotional

security and sexual identity provided by traditional beliefs. (DP-E)

- 5424 Fonaroff, A.** *Cultural perceptions and nutritional disorders: a Jamaican case study.* Bulletin of the Pan American Health Organization (Washington, D.C.), 9(2), 1975, 112-123. Engl. 30 refs. Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 79, 1975.

A study was undertaken in rural Jamaica to test the hypothesis that protein-calorie malnutrition (PCM) is viewed differently by mothers who use medical services and mothers who rely on indigenous practitioners. Accordingly, 50 persons (including women from both categories, public health nurses, traditional midwives, and traditional practitioners) were interviewed regarding PCM aetiology, susceptibility, diagnosis, and treatment. As expected, mothers' views resembled those of the practitioner whom they normally consult and health services users were more likely to identify appropriate techniques for reducing a child's susceptibility to PCM. Implications of the study findings for a health education programme are discussed. (HC-L)

- 5425 Foster, G.M.** *Role of medical anthropology in primary health care.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(4), 1978, 335-340. Engl.

One of the most valuable realizations by anthropologists and health personnel alike is that stereotypes about traditional medicine that have been popularized over the last generation may adversely affect serious consideration of its possible usefulness in official health programmes. Four stereotypes that have been proven to be untrue in a Mexican-American context are that traditional medicine is holistic and considers the whole patient, traditional practitioners are good intermediaries for sociocultural change, traditional people seek traditional healers for certain illnesses and Western physicians for others, and physicians are ignorant of traditional medicine. Ways in which traditional medicine and healers can be used are discussed, with emphasis on midwifery and psychiatry. (DP-E)

- 5426 Gupta, K.** *Qualified personnel or traditional midwives? Women's choice in rural India.* International Nursing Review (Geneva), 25(6), 1978, 175-181. Engl. 8 refs.

In 1976, a study was made in the villages of Barwala and Bataur (India) to determine the inhabitants' preference for trained or untrained health personnel (*dais*) at the time of delivery. Data were collected on 60 women and the personal, physical, and external factors that influenced their decisions were explored. Results showed that trained personnel were called upon whenever there were complications during delivery and by those living close to the health centre, whereas untrained personnel were preferred for their non-nursing functions and by those living far from the health centre. Only 8.33% (5) of the women decided independently to use the health care facilities. Further study is recommended. Statistical data are included. (AF)

- 5427 Hodara, D.** *Aspects de la santé de l'enfant en Chine. (Aspects of child health in China).* Gazette Médicale de France (Paris), 84, 1977, 1023-1024, 1026, 1028. Fren.

Child health is an integral part of the health system in the People's Republic of China and involves no specialized pediatricians as such. This paper examines these aspects of child health in China: the manner in which children are hospitalized (i.e. the mother remains with them in order to avoid the trauma of separation); the cultural, socioeconomic, and medical factors that militate against the incidence of prematurity; and the factors in Chinese life that foster happiness and mental health in children. (HC-L)

- 5428 Kane, R.L., Kasteler, J.M., Gray, R. ed(s).** *Health gap; medical services and the poor.* New York, Springer Publishing, 1976. 321p. Engl.

This book is intended as an introduction to the subject of why the poor do not make better use of available health services. It also contains an extensive annotated bibliography of material on this topic published through July 1974 for those interested in studying the problem in greater detail. Separate sections of the main work deal with: an overview of poverty, illness, and medical utilization; utilization of health services and lifestyles of the poor; community involvement in health care delivery; social, psychological, and structural determinants of health care; attempted solutions, including a neighbourhood health centre and a health insurance plan; and implications for future planning. Statistical data are included. (RMB)

- 5429 Larsen, J.** *Consumer opinion on clinic services in a rural area.* South African Medical Journal (Capetown), 53(21), 27 May 1978, 827-828. Engl.

A survey of women in rural Zululand (South Africa) revealed that most of those interviewed attended antenatal clinics because it was the popular thing to do; the women also claimed that they no longer consulted traditional practitioners, although they still held many traditional beliefs. Attendance problems included transport, lack of time, having no one to care for other children, and obstruction by other members of the family. The women seemed well versed in nutrition and breast-fed their infants for an average of 2 years. (DP-E)

- 5430 Leiderman, P.H., Tulkin, S.R., Rosenfeld, A. ed(s).** *Culture and infancy; variations in the human experience.* London, Academic Press, Child Psychology Series, 1977. 615p. Engl. Refs. Individual chapters have been abstracted separately under entries 5419, 5529, and 5531.

In June 1973, an interdisciplinary conference attended by a group of anthropologists, psychiatrists, psychologists, pediatricians, biologists, and child development experts was held to explore cultural and social influences in infancy and early childhood. This collection of papers from the conference examines the similarities and differences between cross-cultural studies and comparative studies of child development, the definition and developmental meaning of social class differences across cul-

tures, the use of within-group and across-group comparisons, etc. The volume also includes introductory material, a list of contributors, and an index. (DP-E)

- 5431 Micklin, M., Leon, C.A.** *Cultural bases of images of causation in psychological disorder: a Colombian survey.* International Journal of Social Psychiatry (London), 24(2), 1978, 79-94. Engl. Refs.

This study examines the influence of participation in differing sociocultural contexts on beliefs about the causes of psychological disorders. Data were obtained through interviews with 794 laypersons and 333 health workers in Cali, Colombia, from 1968-1969. Results indicate an emphasis on organic causes among lay respondents and nearly equal emphasis on organic and social causes among health personnel. Further variations are evident, between as well as within the two samples, when background characteristics are considered. Differences in these images of causation are explained in terms of the sociocultural organization of Colombian society and the medical subculture. Statistical data are included. (Modified journal abstract.)

- 5432 Nchinda, T.C.** *Household study of illness prevalence and health care preferences in a rural district of Cameroon.* International Journal of Epidemiology (Oxford, UK), 6(3), 1977, 235-241. Engl.

A survey using a recall interval of 1 month was conducted in rural Cameroon from November 1973-March 1974 on a random selection of 1 886 families containing 9 362 individuals. The disease prevalence in the study area (a positive illness rate of 27.8%) was analyzed by age, sex, and treatment preference. Children aged less than 15 years suffered predominantly from respiratory (20%), digestive (29%), and parasitic (12.5%) diseases, for which Western treatment was preferred by 65% of the families surveyed. Traditional treatment was generally preferred for seizures (65%) and mental illnesses (87%). Statistical data are included. (DP-E)

- 5433 Ngubane, H.** *Body and mind in Zulu medicine; an ethnography of health and disease in Nyuswa-Zulu thought and practice.* London, Academic Press, Studies in Anthropology, 1977. 184p. Engl. Refs.

Through field studies of the Nyuswa tribe, South Africa, the author explores Zulu beliefs and customs concerning health and disease. Following background information, chapter 2 examines the causes of illness, which is seen as a disturbance of the balanced relationship between man and his environment. Sickness caused by sorcery is described in chapter 3, while the role of ancestors is discussed in chapter 4. The notion of pollution as a mystical force, especially associated with reproduction, is studied in detail. Further chapters deal with the treatment of disease, herbal medicine, and the elaborate colour symbolism. The final chapter covers evil spirit possession and its treatment. (FM)

- 5434 People, London.** *Female circumcision.* People (London). 6(1), 1979, 24-31. Engl.

The physical and medical aspects of female circumcision, as well as the origins of the practice, are discussed. Traditionally, female circumcision is associated with cleanliness and purity and its general accompaniment, infibulation, with virginity; both practices are symbolic of male domination. In reality, the operation, usually performed by unskilled practitioners with dirty instruments, often results in death due to infection, shock, haemorrhage, tetanus, etc., and almost always causes future problems during sexual intercourse and especially during childbirth. A plea is made to stop this mutilation of women regardless of its contribution to Africa's cultural heritage. (DP-E)

- 5435 Sandler, A.P., Chan, L.S.** *Mexican-American folk belief in a pediatric emergency room.* Medical Care (Philadelphia, Pa.), 16(9), Sep 1978, 778-784. Engl. 10 refs.

A random selection of 85 patients of Mexican origin in the pediatric emergency room of a Los Angeles County medical centre was interviewed to determine the influence of folk beliefs on their attitudes to illness and the decision to seek medical care. In comparing traditional knowledge of causes, symptoms, and treatment with demographic data, it was found that only birthplace was relevant and that informants born in Mexico were more likely to have knowledge of all folk diseases. The implications of such cross-cultural studies for improving pediatric care are also examined. (FM)

- 5436 Teller, C.H.** *Acceso a la atención médica de los migrantes en una ciudad hondureña.* (Access to medical care by migrants in a Hondurenean city). Revista Centroamericana de Ciencias de la Salud (San José), 2(3), Jan-Apr 1976, 163-179. Span. 28 refs.

A review of the literature on rural-urban migration in Latin America caused the authors to question the hypothesis that traditional beliefs are the major obstacle to health services utilization on the part of rural emigrants. Accordingly, they undertook an investigation into the pattern of sickness behaviour in a *barrio* of San Pedro Sula, Honduras, 80% of whose inhabitants had been born elsewhere. The investigation revealed that socioeconomic status rather than traditional attitudes was the major obstacle to the utilization of health services and that certain preselection factors in the emigrant population militated in favour of their rapid assimilation into urban life. This paper describes the study methodology, findings, and conclusions. (HC-L)

- 5437 Tousignant, M.** *Femme dans la médecine traditionnelle mexicaine.* (Women in traditional medicine in Mexico). Social Science and Medicine (Oxford, UK), 12(3B), Jul 1978, 215-218. Fren.

In Mexico, women are playing an increasingly important role in traditional medicine, previously a male-dominated profession. The author rejects as inadequate the conventional explanations of greater secularization and disintegration of the system of religious beliefs as the

reasons why women are emerging as traditional healers. He proposes instead that the complex relationship between the healer and the patient leads to a reversal of sexual roles as part of the ritualistic treatment, counterbalancing the predominance of male values in the Mexican social structure. (FM)

- 5438 WHO, Geneva.** *World directory of schools for auxiliary sanitarians, 1973/Répertoire mondial des écoles d'agents d'assainissement, 1973.* Geneva, WHO, 1978. 84p. Engl., Fren.

This English/French directory contains data up to 1973 on schools for auxiliary sanitarians in those countries whose governments have communicated the requisite information to WHO. Each country is covered in a separate entry, which consists of a table giving the names and addresses of the schools, their admission requirements, duration of training, language of instruction, and other pertinent information. This is followed by a brief text on curriculum content and the tasks the trainee will be expected to carry out after graduation. An annex lists the number of schools for auxiliary sanitarians by country. This directory is part of a WHO series. (DP-E)

V.7 Epidemiological, Family Planning, Maternal Child Health, Nutrition, and Disease Control Studies

See also: 5071, 5216, 5247.

- 5439 Adriasola, G., Juricic, B., Mujica L., H., Mena G., P., Molina C., R.** *Influencia del control prenatal sobre la morbilidad materna y perinatal.* (Influence of prenatal supervision on maternal and perinatal morbidity and mortality). Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 83(5), Nov 1977, 413-424. Span.

Prenatal and obstetric services offered by Chile's national health service were studied through an investigation into the quality of prenatal care, including a comparison between the outcome of supervised and unsupervised pregnancies, in the northern section of Santiago and a comparative study of the quality of obstetric care in areas exhibiting high and low levels of maternal mortality. Study findings indicated, respectively, poor quality prenatal care and very little relationship between health levels and prenatal supervision and an inverse relationship between the effectiveness of medical care and maternal and perinatal death rates. Details of the study methodology and findings are included. (HC-L)

- 5440 Aggarwal, O.P., Gupta, R.S.** *Study of utilization pattern of different medical care facilities in a selected urban locality in New Delhi; a pilot study.* NIHA Bulletin (New Delhi), 9(4), 1976, 289-294. Engl.

In an urban area of India, 80 families were randomly selected and visited to study their utilization of local health services, which included government hospitals, municipal and insurance dispensaries, and private practitioners of various medical systems. Results revealed that only 8% of illnesses were self-diagnosed and treated.

Of the remainder, 80% consulted private practitioners (mainly allopathic), 10% government hospitals, and the rest government dispensaries. Most families felt that private practitioners, who did not charge for consultation, provided immediate care and prompt relief with little waste of time. Statistical data are included. (Modified journal abstract.)

- 5441 Alausa, K.O., Osoba, A.O., Montefiore, D., Sogbetun, O.A.** *Laboratory diagnosis of tuberculosis in a developing country 1968-1975.* African Journal of Medical Sciences (London), 6(2), 1977, 103-108. Engl. 11 refs.

A retrospective study was undertaken of the laboratory findings on all sputum examinations (for tuberculosis) that were conducted in a teaching hospital in Nigeria over an 8-year period. Diagnosis was based on direct microscopy and culture, except where the former method gave a clearly positive result. The study findings, presented in 4 tables, showed that simple, direct microscopy will detect the majority of pulmonary infections but that, for infections involving other parts of the body, cultural examination is virtually essential; they also give some indications of the types and prevalence of tuberculous infections in a developing country. (HC-L)

- 5442 Arambulo, P.V., Cabrera, B.D., Osteria, T.S., Baltazar, J.C.** *Comparative study of Trichomonas vaginalis prevalence in Filipino women.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 8(3), Sep 1977, 298-302. Engl.

A comparative study of *Trichomonas vaginalis* prevalence among 288 Filipino women revealed an overall infection rate of 6.8% (19 women). Prevalence was significantly higher among single women and 5 times higher among the waitress/hostess group; there was an inverse relation to parity and gravidity. No relationship in prevalence was observed between the use or non-use of contraceptives or the type of contraceptive used. Statistical data are included. (DP-E)

- 5443 Avendaño Bertolá, A., Valenzuela Yuraidini, C., Patri Merino, A., Wildner Benavente, E.** *Estatuta, peso y perimetro de brazo de escolares chilenos del Area Norte de Santiago; estudio transversal de mujeres y varones de 6 a 20 años de edad, 1974.* (Height, weight, and arm circumference of Chilean schoolchildren in North Santiago District; cross-sectional study of boys and girls aged 6 to 20 years in 1974). *Pediatría* (Santiago), 19(1), 1976, 13-25. Span. 13 refs.

The absence of national height, weight, and arm circumference norms for Chilean children prompted this study of 1 238 female and 1 347 male middle class children aged 6-20 years. The above-mentioned parameters were ascertained by means of anthropometric techniques used by the International Child Centre, Paris; the children were classified according to the occupation, drinking habits, and possible foreign antecedents of their parents; and the resulting curves were compared with those obtained for French children. The data obtained from the

study are discussed and presented in 11 tables and 10 graphs. (HC-L)

- 5444 Bai, K.I., Sastry, V.N., Somasekhara Reddy, P.** *Mid-arm/head circumference ratio in the assessment of protein calorie malnutrition amongst the under fives.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 22(5), Oct 1976, 216-219. Engl.

Seven hundred and fifty children aged less than 5 years in the pediatric outpatient department of a hospital in Tirupati, Andra Pradesh, India, were screened for mild to moderate malnutrition using the Harvard weight-for-age standards and midarm:head circumference ratio. Total agreement between the two methods was found to be 90.66%. The study confirms the reliability of the midarm:head circumference ratio whose simple, rapid application makes it a desirable diagnostic tool. Statistical data are included. (HC-L)

- 5445 Banik, N.D.** *Some observations on feeding programmes, nutrition and growth of pre-school children in an urban community.* Indian Journal of Pediatrics (Calcutta, India), 44(353), Jun 1977, 139-149. Engl. Refs.

A nutrition survey was conducted among 2 000 children aged up to 5 years in an urban Delhi community. Breast-feeding was prolonged among the lower socioeconomic classes, while supplementary feeding began at 6 months in the higher classes. Deficiency of vitamin A was seen in 8.5% and 24.2% of the higher and lower classes respectively; vitamin B complex was lacking in 6.3% and 16.8%; vitamin D deficiency was noted in 1.1% and 2.9%; and anaemia was found in 14% and 65.8%. Malnutrition was evident in 12.8% and 70.5%. Skeletal development of children from higher classes was comparable to that of US children, while that of the lower classes was slower. (Modified journal abstract.)

- 5446 Belcher, D.W., Afoakwa, S.N., Osei-Tutu, E., Wurapa, F.K., Osei, L.** *Endemic pyoderma in Ghana: a survey in rural villages.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(3), 1977, 204-209. Engl. 26 refs.

From February-April 1975, a Danfa Project (Ghana) survey of 20 villages that gave complete medical examinations to over 95% of the inhabitants diagnosed pyoderma in 19.4% of the villagers examined. Peak rates occurred in children aged 5-9 years and, in adults, the disease was more prevalent among males and unskilled labourers and farmers. Current knowledge of transmission and control of pyoderma is discussed. Statistical data are included. (DP-E)

- 5447 Belcher, J.C.** *Sanitation norms in rural areas; a cross-cultural comparison.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(1), 1978, 34-44. Engl. 8 refs. Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 84(4), 1978.

Because communicable diseases have largely been

brought under control, health status now depends to a large extent on environmental health and sanitation. Surveys were conducted in three rural areas in the south-eastern USA, Puerto Rico, and the Dominican Republic to measure and compare sanitation norms relating to household water supply, personal hygiene, and disposal of liquid and solid wastes and garbage. Participants were also asked about recent sanitation problems (i.e., rats, cockroaches, etc.) and their sanitation knowledge was assessed. In each area there were practices that could be conducive to disease. (DP-E)

5448 Berger, H.M., King, J., Doughty, S., Wharton, B.A. *Nutrition, sex, gestational age, and hair growth in babies.* Archives of Disease in Childhood (London), 53(4), 1978, 290-294. Engl. Refs. Measurements of hair growth as a sensitive indicator of nutrition were assessed in the perinatal period. The proportion of growing roots and their diameter were studied at birth in 114 babies and repeated 3 weeks later in 29 low-birth-weight babies. Intrauterine malnutrition resulted in thinner roots, but the changes after birth were not related to nutrition and these measurements will not be useful in feeding studies in this period. At birth, gestational age and sex affected the hair root and it may be important to recognize these differences if hair is used in biochemical screening tests. A technique for measuring root diameter using an image-splitting eye-piece is described. (Modified journal abstract.)

5449 Bibera, S.B., López, H.G., Rabuco, L.B., Sakdalan, Z.C., Salvosa, C.B. *Origins of malnutrition during childhood: a study of two cases in Manila, Philippines.* Philippine Journal of Nutrition (Manila), 29(3), Jul-Sep 1976, 105-110. Engl. 20 refs. In order to shed some light on the complexity of the problem of malnutrition, the homes of two Filipino children who had previously been hospitalized for severe malnutrition were visited and observations made regarding their clinical histories, physical states, diets, household conditions, and family circumstances. This paper presents the results of the observations; tabulates the kinds, quantities, and nutrient value of the foods consumed by the children on 6 separate days; and discusses a number of possible explanations for, and solutions to, their condition. Statistical data are included. (HC-L)

5450 Blayo, Y., Veron, J. *Fécondité dans quelques pays d'Asie orientale. (Fertility in a few countries of Eastern Asia).* Population (Paris), 32(4-5), Jul-Oct 1977, 945-975. Fren.

Statistical analysis of fertility data from some Southeast Asian countries reveals a tendency toward reduced population growth that: has barely begun in Indonesia, Thailand, and the Philippines; is well underway in South Korea and Malaysia; and has proceeded at an unprecedented rate in Singapore, Hong Kong, and Taiwan. In some countries, it is attributed to later marriage and, in others, to reduced fertility in the older groups; in either case, it has preceded the introduction of family planning programmes. (HC-L)

5451 Booth, K., Amato, D. *Leukaemia in Papua New Guinea.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1978, 343-349. Engl. Refs.

All cases of leukemia diagnosed from 1968-1976 in the Melanesian population of Papua New Guinea were analyzed and compared to an earlier series and to findings from other countries. The major findings were: a low overall incidence (0.79:100 000), absence of a childhood or old age peak in incidence, more than the expected proportion of cases of chronic granulocytic leukemia in subjects aged less than 20 years, and the rarity of chronic lymphocytic leukemia. Statistical data are included. (Modified journal abstract.)

5452 Booyens, J., Luitingh, M.L., Edwards, H., van Rensburg, C.F. *Skinfold thickness measurements in assessment of nutritional status of Indian and white schoolchildren.* South African Medical Journal (Capetown), 17 Dec 1977, 1044-1048. Engl.

A statistical comparison of the height-, weight-, and skinfold thickness-for-age measurements of Indian schoolchildren with those of children of European descent indicated that, although a high degree of correlation existed between height and weight for age of European children, this was not true for Indian children. However, despite the extremely low heights and weights observed in Indian children, which could indicate chronic undernutrition, the skinfold thicknesses were close to normal when judged by conventional standards. It is concluded that, in the indirect assessment of nutritional status of Indian subjects, anthropometric variables should be used with caution. (Modified journal abstract.)

5453 Breakey, G.F., Voulgaropoulos, E. *Laos health survey: Mekong Valley, 1968-1969.* Honolulu, University Press of Hawaii, 1976. 129p. Engl. Refs.

The purpose of this survey was to establish baseline data on some of the health problems found among the people of the Mekong Delta, Laos. The data were gathered by means of interviews with some 200 persons in each of 15 villages considered representative of certain geographical areas, specific cultural groups, and both urban and rural areas of the country. This book presents and discusses the study findings under these headings: environmental sanitation and related disease patterns, cultural attitudes related to health, fertility and mortality, maternal and child health, nutrition and nutritionally related conditions, mosquito-borne diseases, diseases transmitted via the respiratory route, schistosomiasis, diseases transmitted by direct contact, and miscellaneous conditions (bladder stones, eye diseases, etc.). Some general recommendations follow. (HC-L)

5454 Brinkman, U.K. *Epidemiological investigations of bancroftian filariasis in the coastal zone of Liberia.* Tropenmedizin und Parasitologie (Stuttgart, Germany), 28(1), 1976, 71-76. Engl. 16 refs.

A survey in five study areas along the Liberian coast was conducted to gain information on the prevalence and importance of bancroftian filariasis. The examination of 2 675 persons revealed a prevalence rate of 2%-37%. It was extrapolated from the survey results that, in a population of 71 000, there are 16 000-20 000 infected with *Wuchereria bancrofti*. An estimated 2 500-4 000 men suffering from hydroceles and 3 700-4 000 elephantiasis patients demonstrate that bancroftian filariasis has to be regarded as a health problem in rural coastal Liberia. Statistical data are included. (Modified journal abstract.)

- 5455 Brooke, O.G., Alvear, J. High fat feeding in immature infants.** *Nutrition and Metabolism* (Basel, Switzerland), 21, 1977, Suppl. 1, 104-106. Engl.

Fifteen premature infants were administered added-fat formula — peanut oil in eight cases and medium chain triglycerides (MCT) in seven — and regular formula in alternate 10-day periods; their energy absorption was monitored by means of bomb calorimetry. The high fat diets were found to be well tolerated and to produce greater energy absorption (24% and 17% more per 100 ml feed) than the regular milk formula. A longer trial would be required to determine whether the ingested fat can be used for growth. Since peanut oil seems as well absorbed as MCT, it should be used in preference to ensure an adequate intake of essential fatty acids. (HC-L)

- 5456 Brown, G.W., Robinson, D.M., Huxsoll, D.L. Serological evidence for a high incidence of transmission of *Rickettsia tsutsugamushi* in two Orang Asli settlements in peninsular Malaysia.** *American Journal of Tropical Medicine and Hygiene* (Baltimore, Md.), 27(1), 1978, 121-124. Engl. 8 refs.

Two communities of Orang Asli Aborigines in peninsular Malaysia were observed for evidence of *Rickettsia tsutsugamushi* infection over periods of 1-8 months. Sequential sera were examined for antibodies by the direct immunofluorescence test. The incidence of infection in the two self-selected populations was calculated to be 3.9% per month and 3.2% per month. Statistical data are included. (Modified journal abstract.)

- 5457 Bulla, A., Hitze, K.L. Acute respiratory infections: a review.** *Bulletin of the World Health Organization* (Geneva), 56(3), 1978, 481-498. Engl. 39 refs.

Also published in French and Spanish.

Acute respiratory infections (ARI) constitute one of the principal causes of morbidity and mortality in many countries. Data from 88 countries, with a total population of nearly 1 200 million, showed that deaths due to ARI in 1972 totalled 666 000. Pneumonia, both viral and bacterial, accounted for 75.5% of the total deaths from ARI. Mortality from ARI represents 6.3% of deaths from all causes. Mortality from ARI is highest in infants and the elderly. Statistical data are included. (Modified journal abstract.)

- 5458 Bura, M.W., Willett, W.C. Outbreak of trichinosis in Tanzania.** *East African Medical Journal* (Nairobi), 54(4), Apr 1977, 185-193. Engl. 11 refs.

The 1st cases of human trichinosis in Tanzania occurred in 11 persons in Mbulu District who had partaken of a warthog. The attack rate for those who ate the suspected meat was 46% and two cases were fatal. This paper summarizes the clinical data on the persons afflicted, noting that the strain *Trichinella spiralis* involved was similar to that previously isolated in Kenya. Evidence suggests that the epidemiology of trichinosis in Africa is changing and may represent a potential health problem when domestic pigs raised for selling over a large area are infected through contact with wild pigs. (HC-L)

- 5459 Carney, W.P., Masri, S., Stafford, E.E., Putrali, J. Intestinal and blood parasites in the north Lore district, central Sulawesi, Indonesia.** *South-east Asian Journal of Tropical Medicine and Public Health* (Bangkok), 8(2), Jun 1977, 165-172. Engl. 12 refs.

Over 1 000 stool specimens from residents of the Napu and Besoa Valleys (Indonesia) were examined for intestinal parasites. *Schistosoma japonicus* was detected in 31% of Napu Valley residents but only 2% of Besoa Valley inhabitants. Hookworm was the most common helminthic infection in both valleys; other helminths found were *Ascaris lumbricoides*, *Trichuris trichuria*, *Enterobius vermicularis*, etc. Statistical data are included. (Modified journal abstract.)

- 5460 Carrada Bravo, T. Vacunación antitetánica en la República Mexicana; investigación preliminar. (Antitetanus vaccination in Mexico; preliminary research).** *Salud Pública de México* (Mexico City), 19(4), Jul-Aug 1977, 579-596. Span. 21 refs.

The history of antitetanus immunization in Mexico, which began in 1910, is briefly reviewed. By 1975, mass campaigns had achieved full coverage by a course of 3 injections of approximately 56.7% of children aged less than 9 years and 80% of children aged less than 4 years. Adult coverage for the same period was only 26.3%. Two serious outbreaks of postvaccinal tetanus, attributed to contamination of a batch of DPT vaccine with crude tetanus toxin, are described. The basis for a new and simplified vaccination programme is outlined and new techniques of vaccination are discussed, with emphasis on the superiority of active over passive vaccine. (Modified journal abstract.)

- 5461 Chaudhury, P., Thirupuram, S., Gupta, S. Study of maternal and neonatal factors in relation to perinatal mortality.** *Indian Pediatrics* (Calcutta, India), 15(4), Apr 1978, 311-318. Engl. 8 refs.

Of 2 495 consecutive births over a period of 1 year in Maulana Azad Medical College and Irwin Hospital (New Delhi, India), perinatal mortality was 74.5:1 000, the stillbirth rate 39:1 000, and early neonatal deaths 37.1:1 000. Birth weight and gestational age were the most important factors influencing survival; 90.3% of

total deaths occurred among low-birth-weight babies (2 500 g or less), who constituted only 18% of total births. Perinatal mortality was also correlated to parity, maternal age, type of birth, and mode of delivery. Statistical data are included. (Modified journal abstract.)

- 5462 Chawhan, R.N., Talib, S.H., Zaheer, A., Sen-gupta, S.R., Talib, V.H.** *Some observations on neonatal tetanus.* Clinician (Goa, India), 41(5), May 1977, 189-193. Engl. 20 refs.

Twenty-five cases of neonatal tetanus, out of 692 tetanus cases admitted to an Indian hospital from 1971-1975, are discussed. All the infants were from lower socioeconomic groups and rural areas. The mortality rate was 80% and the incidence of complications 70%; the most common complication was bronchopneumonia and hyperpyrexia. Clinical treatment and symptomatology are described. Statistical data are included. (Modified journal abstract.)

- 5463 Chen, R.S.** *Oral hygiene and gingivitis among children in Chung-Shin village and Tsao Tung township.* Journal of the Formosan Medical Association (Taipei), 77(2), 1978, 244-250. Engl. 17 refs.

A dental health survey of 9 633 children aged 3-15 years was conducted in two rural areas in Taiwan 3 years after the implementation of a fluoridation programme. Approximately 98% of the children were found to have gingivitis, its incidence rising rapidly from age 6 years to a peak at age 12; most of these children (79%), however, exhibited fair oral hygiene. Incidence of gingivitis was approximately the same as in 1971 but oral hygiene had improved, perhaps as the result of educational efforts on the part of dental personnel during the baseline survey. Statistical data are included. (HC-L)

- 5464 Chen, S.T.** *Longitudinal study on physical growth of primary school children in Malaysia.* Medical Journal of Malaysia (Singapore), 32(1), 1977, 17-21. Engl. 11 refs.

From 1969-1975, 686 normal Malaysian schoolchildren of all races and both sexes from Petaling Jaya were examined annually for growth and nutritional status. Although, according to the Boston criteria, 33% of the children were found to have a significant deficit in weight for age and height for age, only 9% were malnourished enough to require treatment. As a result of this study, growth charts based on average measurements for Malaysian children have been drawn up for use in schools and by child health practitioners. Statistical data are included. (DP-E)

- 5465 Chinese Medical Journal, Peking.** *Preparation and nutritive value of a milk substitute.* Chinese Medical Journal (Peking), 92(2), Feb 1979, 101-106. Engl. 9 refs.

The formula of a milk substitute for infant feeding, developed by a barefoot doctor in Kiangsu, People's Republic of China, is described. The recipe includes soybean flour, rice flour, corn flour, cane sugar, fresh eggs, edible vegetable oil, egg shell powder, and ribofla-

vin. Toxic factors in the soybean flour (trypsin inhibitor and hemagglutinin) are eliminated by steaming and desiccation. Chemical analysis of the product showed it met minimum daily requirements of calcium, protein, and iron. Feeding trials made on 20 infants showed it has growth promoting effects comparable to those of breast milk. (Modified journal abstract.)

- 5466 Christie, J.D., Upatham, E.S.** *Control of Schistosoma mansoni transmission by chemotherapy in St. Lucia; II: biological results.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(5), Sep 1977, 894-898. Engl. 9 refs.

See also entry 5471.

Chemotherapy of all persons infected with *Schistosoma mansoni* was begun in Marquis Valley, St. Lucia, in March 1974. From January 1972 to the start of chemotherapy, the infection rate in field *Biomphalaria glabrata* was 1.09% (117:10 736) and the ratio in sentinel *B. glabrata* was 1.48% (56:3 790). From March 1974-December 1975, no infections were detected in either type of snail. The data suggest that, because of differences in topography and average rainfall, *S. mansoni* transmission occurs in this valley during the rainy season, while in other St. Lucian valleys under study it occurs during the dry season. (Modified journal abstract.)

- 5467 Chu, K.Y.** *Trials of ecological and chemical measures for the control of Schistosoma haematobium transmissions in a Volta Lake region.* Bulletin of the World Health Organization (Geneva), 56(2), 1978, 313-322. Engl.

Also published in French and Spanish.

Studies were made at a Volta Lake village (Ghana) to test means of controlling the transmission of schistosomiasis. Removal of a common aquatic weed that serves as a breeding ground for the carrier reduced the density of infected and uninfected snails but did not interrupt transmission. A molluscicide containing Niclosamide, applied after weed removal at five isolated sites, was effective in killing the snails and keeping the sites free of infection for 22-26 days. Although snail control along the entire lake shore is impossible, control at water contact sites only is attainable. Statistical data are included. (FM)

- 5468 Chun, S.K.** *Applied nutrition programmes in Korea.* In Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, FAO, 1977, 35-46. Engl. Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

For complete document see entry 5489.

There are approximately 322 home improvement workers in Korea, each providing nutrition education, advice on appropriate farm technology and labour-saving devices, and training to village women. The results of a survey of the home improvement programme reveal that: *per capita* daily nutrient intake increased by 5%; average weight and height of children aged 6 years had increased;

by using day care centres during busy farming seasons, rural women had increased their labour output by 2 hours; etc. Also discussed are increases in farm income and the village revolving fund. Future plans and policies are examined. Statistical data are included. (DP-E)

- 5469 Chutanni, C.S., Bhatia, J.C., Dharmvir, Tim-mappaya, A.** *Factors responsible for under-utilization of primary health centre; a community survey in three states of India.* NIHA Bulletin (New Delhi), 9(3), 1976, 229-237. Engl.

Community surveys of government health services utilization undertaken in four blocks in different Indian states revealed that, while 85% of households were aware of government services, less than half had ever used them. Distance was important since, in villages more than 5 km from a primary health centre, only 65% knew of their existence and only 32% had ever used the services. Reasons for dissatisfaction with the services and discontinued use included lack of medicines, which was associated with little relief of symptoms, and impersonal and rude behaviour of medical officers. Suggestions for improvement are made. Statistical data are included. (DP-E)

- 5470 Chuttani, C.S., Prakash, K., Gupta, P., Grover, V., Kumar, A.** *Controlled field trial of a high-dose oral killed typhoid vaccine in India.* Bulletin of the World Health Organization (Geneva), 55(5), 1977, 643-644. Engl.

Also published in French and Spanish.

A controlled field trial of a modified oral vaccine containing *Salmonella typhi*, TY2 strain, in a dose of 400×10^9 killed organisms per capsule, was carried out in Indian schoolchildren aged 6-17 years. The children were followed up for 6-8 months. There were 66 cases of typhoid fever in the vaccine group (7 312 children) and 54 in the control group (7 292 children who had received a placebo); this difference was not considered statistically significant. The results confirmed that, as found in earlier trials, oral typhoid vaccines in dosages used so far give no protection. (Modified journal abstract.)

- 5471 Cook, J.A., Jordan, P., Bartholomew, R.K.** *Control of Schistosoma mansoni transmission by chemotherapy in St. Lucia; I: results in man.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(5), Sep 1977, 887-893. Engl. 10 refs.

See also entry 5466.

A rapid, effective, and relatively inexpensive schistosomiasis control programme that consisted only of treating all persons infected in the Marquis Valley, St. Lucia, is described. In 1974, 709 patients were treated, mainly by a single injection of hycanthone, and, in 1975, 159 patients received similar treatment. The major side effect was vomiting, which occurred in 22% of the cases treated. In villages with initially high transmission rates, the incidence of new infection in children aged 0-14 years fell from 20.8% before chemotherapy to 7.4% after 1 year and to 3.7% after 2 years, a great improvement over

areas not covered by the control programme. Statistical data are included. (Modified journal abstract.)

- 5472 Cornille-Brögger, R., Mathews, H.M., Storey, J., Ashkar, T.S., Brogger, S.** *Changing patterns in the humoral immune response to malaria before, during, and after the application of control measures: a longitudinal study in the West African savanna.* Bulletin of the World Health Organization (Geneva), 56(4), 1978, 579-600. Engl. 12 refs. Also published in French and Spanish.

A longitudinal seroimmunological investigation of malaria was performed as part of a WHO research project in northern Nigeria from 1970-1975. The project included a preintervention phase, an intervention phase with application of malaria control measures (spraying of residual insecticide and mass drug administration), and a postintervention phase. Serological observations were made on the inhabitants of 8 villages with a total population of 3 000. The project's findings are examined and statistical data are included. (Modified journal abstract.)

- 5473 Dalton, P.R., Pole, D.** *Water-contact patterns in relation to Schistosoma haematobium infection.* Bulletin of the World Health Organization (Geneva), 56(3), 1978, 417-426. Engl. 11 refs.

Also published in French and Spanish.

Water-contact observations were carried out on 132 individuals exposed to *Schistosoma haematobium* in a village on a man-made lake in Lake Volta, Ghana, for 12 months prior to the introduction of control measures. In a multiple regression analysis of the resulting data, specific activities, notably water contact for domestic purposes and activities associated with fishermen's canoes, were found to be significantly related to schistosomiasis. Age was less important than degree of exposure as a contributory factor to variations in infection rates. Statistical data are included. (Modified journal abstract.)

- 5474 Darmanger, A.M., Nekzad, S.M., Kuis, M., ten Dam, H.G.** *BCG vaccination by bifurcated needle in a pilot vaccination programme.* Bulletin of the World Health Organization (Geneva), 55(1), 1978, 49-61. Engl.

Also published in French and Spanish.

Because of its operational convenience and the availability of trained personnel (smallpox vaccinators) to administer it, the bifurcated needle technique has been considered for use in BCG immunization. This paper compares the performance of the bifurcated needle and the intradermal technique in a routine vaccination programme in Afghanistan. Although the bifurcated needle was found to produce substantial tuberculin sensitivity (significantly less than that of the intradermal technique, however), it did not result in increased coverage and output and was probably more expensive than the intradermal. Statistical data are included. (HC-L)

- 5475 Dayal, R.S., Kumar, R., Kalra, K.** *Infant growth survey at Agra: an anthropometric profile.* Indian Pediatrics (Calcutta, India), 14(12), Dec 1977, 979-986. Engl. 11 refs.

See also entry 5087.

Anthropometric measurements taken on 4 456 infants at Agra, India, from 1969-1972 are presented in tabular form and compared to the Harvard standard. In both sexes, the mean birth weight more than doubled from age 1-6 months but fell short of being 3 times the birth weight by age 12 months. All weights were below Harvard standards. Crown-to-heel length remained constant at birth and at age 6 months but showed a downward trend at age 12 months. There was a fall in head:chest circumference ratio between birth and age 1 month and between age 1-2 months. Thereafter, the growth of the two measurements was almost equal. (FM)

- 5476 de la Loza Saldivar, A., Gómez Orozco, J., Lara Escarcega, D., Lima Ramirez, X.** *Desviaciones principales de la mortalidad por entidades federativas en la República Mexicana. (Variations in mortality among Mexican states).* Salud Pública de México (Mexico City), 19(4), Jul-Aug 1977, 553-577. Span.

The following statistical data for each of the states of Mexico are given: overall mortality, mortality by year (1970-1974), mortality by age group, under-five mortality as a percentage of overall mortality, mortality by cause, percentage of deaths due to infectious or parasitic diseases, percentage of deaths attributed to ill-defined or symptomatic states, and maternal mortality. Tabular and graphic presentation permits easy inter-state comparison. (HC-L)

- 5477 Deb, B.C., De, S.P., Singh, A., Singh, P.K., Pal, S.C.** *Massive outbreak of gastro-enteritis amongst children in Manipur, 1973-1974.* Indian Journal of Medical Research (New Delhi), 65(3), Mar 1977, 320-326. Engl. 8 refs.

Recurrent outbreaks of acute gastroenteritis amongst children aged less than 4 years were reported from Manipur State, India, during every winter season since 1969. Investigation of one such epidemic revealed 3 438 cases, 88.3% in children aged less than 2 years and 58% in children aged 7-12 months. Thirty-eight children with typical clinical features were examined bacteriologically and the epidemic strain was identified. This paper describes the study methodology and findings plus evidence indicating the likelihood that the water supply, contaminated by healthy adult carriers of the strain, was responsible for transmitting the infection. (HC-L)

- 5478 Devadas, R.P., Kupputhail, U., Dhanalakshmi, M.** *Evaluation of the school lunch programme in four selected primary schools in Coimbatore City.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(5), May 1978, 144-148. Engl. Four school lunch programmes in Coimbatore, India, are evaluated in terms of hygienic practices, nutritional content, anthropometric measurements of 500 randomly-selected participants, the children's level of nutrition-

al knowledge, their attendance and class performance, their attitudes and food likes and dislikes, and their parents' attitudes towards the programme. Only one privately-managed school with a separate school kitchen received consistently high scores in all areas. Statistical data are included. (DP-E)

- 5479 Devadas, R.P., Vijayalakshmi, P., Vanitha, R.** *Impact of nutrition on pregnancy, lactation and growth performance of extero-gestate foetus.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(2), Feb 1978, 31-37. Engl. 9 refs. Studies of 650 pregnant women and their infants from high- and low-income groups in Coimbatore (India) indicated that the nutrition of the 1st group was almost adequate while that of the 2nd was inadequate; the food beliefs of both groups were similar. High-income women gained an average of 9.5 kg during pregnancy, while low-income women gained only 6.8 kg and showed more signs of nutritional deficiency. A number of anthropometric measurements indicated that the nutritional status of the mother affected the outcome of the pregnancy and the growth performance of the infant. Statistical data are included. (Modified journal abstract.)

- 5480 Devadas, R.P., Easwaran, P.P., Ponnammal, K.** *Diet and nutrition in the first year of life; part II: cross sectional cum semi longitudinal study of physical measurements.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 14(12), Dec 1977, 361-365. Engl. See also entry 5090.

A Coimbatore (India) nutrition survey of 1 759 low-income children aged less than 1 year showed that mean height for both sexes consistently increased over the 1st 12 months of life except between the 9th and 10th month; boys gained 20 cm and girls 19 cm. The increase in body weight during the 1st year was 4.5 kg for the boys and 4.7 kg for the girls. Increases were greater among higher-income families and among infants who were not exclusively breast-fed. Statistical data and additional anthropometric measurements are given. (Modified journal abstract.)

- 5481 Disengomoka, I.** *Aspects cliniques et radiologiques de 1 167 écoliers du groupe scolaire du Mont Amba; résultats préliminaires. (Clinical and radiological characteristics of 1 167 school-children from Mont Amba; preliminary results).* Médecine d'Afrique Noire (Paris), 25(12), Dec 1978, 783-790. Fren. 18 refs.

This paper describes the 1st epidemiological study of overall school health ever conducted in Zaire. The study was based on clinical and radiological examination of 1 167 children aged 6-13.5 years in a school which, although located in a relatively high-income area, had never benefited from an organized school health programme. The children scored well on biometric measurements and exhibited few contagious diseases (notably, tuberculosis) but presented a high prevalence of conditions due to lack of health education (e.g., skin diseases), insufficient application of preventive medicine (e.g., se-

quelae of previously-contracted infectious diseases), and harmful practices associated with civilization (dental caries). More complete data from the study are set forward in seven tables. (HC-L)

- 5482** Dissanaïke, A.S., Thomas, V., Kan, S.P., Ong, H.T. *Studies on parasitic infections in Orang Asli (Aborigines) in peninsular Malaysia*. Medical Journal of Malaysia (Singapore), 32(1), Sep 1977, 48-55. Engl. Refs.

The prevalence of intestinal parasites, malaria, and filariasis in a sample of Orang Asli Aborigines in Malaysia was noted and compared to the results of previous studies. A higher prevalence of hookworm and *Trichuris* infections in this study is attributed to the more comprehensive examination used. In view of reports of apparent *Schistosoma japonicum* infections in these Aborigines, a detailed search for eggs was unsuccessfully made, although, of two skin test positives, one case was that of a patient with *Schistosoma* eggs seen in a needle biopsy. Statistical data are included. (Modified journal abstract.)

- 5483** Dutt, J.S., Baker, P.T. *Environment, migration and health in southern Peru*. Social Science and Medicine (Oxford, UK), 12(1B), Jan 1978, 29-38. Engl. 22 refs.

A health questionnaire was administered to three Peruvian populations: low-altitude sedentary, low-altitude migrants, and high-altitude migrants, all of whom resided in the same low-altitude valley. Estimates of health were computed for each individual by summing up the number of symptoms recorded. In general, high-altitude migrants reported more symptoms. It is suggested that the population differences are primarily the result of changes in the physical and cultural environments related to migration and that high-altitude migrants have the most symptoms because they have experienced the greatest change. Statistical data are included. (Modified journal abstract.)

- 5484** Duvallet, G., Saliou, P. *Organisation du dépistage de la trypanosomiase humaine en Afrique de l'Ouest. (Organization of mass screening for human trypanosomiasis in West Africa)*. Médecine Tropicale (Marseille, France), 38(5), Sep-Oct 1978, 533-536. Fren. 13 refs.

In order to reduce residual trypanosomiasis in West Africa, it is essential to use an effective immunological diagnostic method in large scale campaigns. At the moment, the most reliable method is the indirect immunofluorescence antibody test. Its chief disadvantages are due to delays in transport of specimens to the central laboratory for examination and lack of follow-up tests. The authors suggest that these features can be improved by the creation of mobile teams, equipped to carry out immunological diagnosis and parasitological tests in the field. (FM)

- 5485** Effiong, C.E. *Neonatal morbidity and mortality in Ibadan: a review of cases seen in the outpatient clinic*. Journal of Tropical Pediatrics and

Environmental Child Health (Kampala), 22(6), Dec 1976, 265-267. Engl. 9 refs.

A review of 1972 records from the Children's Emergency Room, University College Hospital, Ibadan, Nigeria, has shown that of the 372 neonates admitted, 79 (21.2%) died. Jaundice, infections (including tetanus), and congenital malformations accounted for 84% of the admissions and 77% of the deaths. It is suggested that both morbidity and mortality from jaundice and infection could be reduced through health education and the immunization of antenatal clinic attenders against tetanus. It is also deemed expedient that, in view of lack of space in the Children's Ward, the Children's Emergency Room be equipped with neonatal facilities such as incubators. (HC-L)

- 5486** Egoz, N., Michaeli, D. *Epidemiological, immunological and clinical problems of cutaneous leishmaniasis in Israel; a review*. Revue Internationale des Services de Santé des Armées de Terre (Paris), 51(2), 1978, 151-157. Engl.

Thirty-fifth Session of the International Office of Documentation on Military Medicine, Seoul, Korea, Apr 1977.

A study was made of an ancient focus of cutaneous leishmaniasis in the area around Jericho (Israel), where 583 cases (80% males) were reported from 1967-1975, with a seasonal high during July and August. Various methods of control were tried. Eradication of the vector sandflies was possible only in limited camp sites and other defined areas and it was impossible to eliminate the reservoir host, a field rodent. An immunization programme begun in 1968 had an 86% rate of positive reactions, which had dropped to 22% by 1975. Statistical data are included. (Modified journal abstract.)

- 5487** Eka, O.U. *Chemical evaluation of nutritive value of soya paps and porridges, the Nigerian weaning foods*. Food Chemistry (Barking, UK), 3(3), 1978, 199-206. Engl. Refs.

In Nigeria, chemical analysis was utilized to determine the nutritive value of the following weaning foods: paps and porridges prepared from millet, maize, and guinea corn; paps and porridges prepared from millet supplemented with soya bean milk or soya bean flour; and Cerelac, a commercial infant food. The nutrient status of the fortified paps and porridges was found to be comparable to that of Cerelac; it is suggested that they be made available in all areas where malnutrition occurs. (HC-L)

- 5488** El Goulli, M., Chelli, H., Chelli, M. *Mortalité maternelle à la maternité de l'hôpital Charles Nicolle à Tunis de 1972 à 1975; avortements exceptés. (Maternal mortality at the Charles Nicolle Hospital maternity department in Tunis between 1972 and 1975; abortions excluded)*. Journal de Gynécologie, Obstétrique et Biologie de la Reproduction (Paris), 7(4), May-Jun 1978, 779-784. Fren.

The overall figure in this Tunisian hospital for maternal mortality during the time of pregnancy, labour, and the

puerperium was 54:100 000 deliveries from 1972-1975. This represents a 50% reduction compared to previous years. This improvement can be ascribed to many factors, including an increase in the numbers and quality of medical and paramedical personnel and the improved living conditions of the inhabitants of the region. On the other hand, there has been no change in the order of the causes, which are principally haemorrhage and eclampsia. Improvements are still needed in such areas as equipment for maternity departments and education campaigns for pregnant women. (Modified journal abstract.)

5489 **FAO, Bangkok.** *Report on the Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East.* Bangkok, FAO, Food and Nutrition, No. RAPE 30, 1977. 209p. Engl.

Consultation on Improving Nutrition of the Rural Poor in Asia and the Far East, Bangkok, Thailand, 7-11 Mar 1977.

Individual papers have been abstracted separately under entries 4981, 4995, 4997, 4998, 5013, 5018, 5063, 5069, 5086, 5099, 5101, 5119, 5125, and 5468.

Section 1 of this consultation report contains the opening addresses and keynote papers; section 2, case studies of nutrition programmes in Korea, Malaysia, Thailand, the Philippines, and India; section 3, resource papers on public health nutrition in rural areas, nutrition surveillance and feeding programmes at the village level, and self-help and women's programmes; and section 4, studies of nutrition improvement programmes in the Philippines, Bangladesh, Indonesia, and Pakistan. A list of participants is included in an appendix. (DP-E)

5490 **Flores, M.** *Perfiles dietéticos según el nivel socioeconómico en Honduras. (Dietary profiles according to socioeconomic status in Honduras).* Archivos Latinoamericanos de Nutrición (Caracas), 26(4), Dec 1976, 401-423. Span. 15 refs.

The diet of 127 families and 89 preschool children in rural Honduras was studied. For family members, the main dietary item was 303 g of maize tortillas daily, with 215 g of milk and milk products, 42 g of meat, and 45 g of legumes. For children, the main item was 229 g of milk and milk products with 128 g of maize tortilla. Intake of most items rose with socioeconomic status. For families of low, intermediate, and high socioeconomic status, diets supplied 1 337, 1 599, and 2 131 kcal with protein 42.1, 50.2, and 68.8 g daily; for the children corresponding values were 732, 833, and 1 125 kcal and protein 23.2, 24.2, and 37.5 g. Statistical data are included. (RMB)

5491 **Frankish, J.G.** *Nutrition rehabilitation in Transkei; an evaluation.* South African Medical Journal (Capetown), 53(13), 1 Apr 1978, 507-511. Engl.

A total of 88 children and their guardians admitted to the nutrition rehabilitation units (NRUs) of Holy Cross Mission and Rietvlei Hospitals, Transkei, were followed up at their homes after discharge. Questionnaires were

used to obtain information on the nutrition knowledge of the guardian, changes implemented in home practices, and the condition of the child. The influence of length of stay, teaching methods of each centre, and socioeconomic status of the families are also analyzed. Generally, it is felt that, although the NRUs do increase nutritional knowledge and bring about some improvements in dietary patterns, their effects are small compared to the enormity of the problem and the number of other social and agricultural factors involved. (FM)

5492 **Frezil, J.L., Coulm, J.** *Etude de la trypanosomiase humaine africaine dans le nouveau foyer de Mantsoumba. (Study of African human trypanosomiasis in a new focus in Mantsoumba).* Médecine d'Afrique Noire (Paris), 26(1), Jan 1979, 41-46. Fren. 9 refs.

An outbreak of trypanosomiasis in the area of Mantsoumba, the Congo, led to this field survey and epidemiological study. Following a description of the physical characteristics of the area, diagnostic methods are discussed and the reliability of indirect immunofluorescence is proven. Epidemiological studies showed that men are affected more than women and adolescents more than young children. Transmission of the disease takes place in the forested area surrounding the village and along the river, places more frequented by men than women and children. The fact that the region is served by road, river, and railway helps to explain the rapid spread of the disease. (FM)

5493 **Frohberg, H.** International Institute for Applied Systems Analysis, Laxenburg, Austria. *Relationship between nutrition and health: the present situation in Africa.* Laxenburg, Austria, International Institute for Applied Systems Analysis, Research Memorandum RM-78-72, 1978. 38p. Engl. 30 refs.

A brief overview of the nutritional status of Africa is presented. For this purpose, the nutritional requirements of each country have been estimated and compared with available food supplies. These calculations reveal that: 17% of African countries have excess caloric supplies; 20% have available more than 90% of their requirements, with an adequate supply of protein; 25% are deficient in calories but adequate in protein; 10% are deficient in protein but adequate in calories; and 6% are deficient in both protein and calories. It is concluded that the main problem in Africa is lack of food rather than protein. Copious statistical data are included. (RMB)

5494 **Gaitán, E., Merino, H., Rodríguez, G., Medina, P., Meyer, J.D.** *Epidemiology of endemic goitre in western Colombia.* Bulletin of the World Health Organization (Geneva), 53(3), 1978, 403-416. Engl. 56 refs.

Also published in French and Spanish.

Recent epidemiological observations in western Colombia demonstrate the presence of naturally-occurring goitrogens contaminating water supplies in areas where goitre persists despite iodine supplementation. Studies in 41 locations where the populations have received uni-

form and adequate iodine supplementation for 10-20 years indicate that in these areas environmental factors other than iodine deficiency are responsible for endemic goitre. In this case, water was contaminated with sulfur-bearing organic compounds that caused the condition. Statistical data are included. (Modified journal abstract.)

- 5495** García Palmieri, M.R., Costas, R., Cruz Vidal, M., Cortés Alicea, M., Patterne, D. *Urban-rural differences in coronary heart disease in a low incidence area; the Puerto Rico heart study.* American Journal of Epidemiology (Baltimore, Md.), 107(3), 1978, 206-215. Engl. 16 refs.

This report explores coronary heart disease (CHD) risk factors and the incidence of new CHD events developing over a 30-month period in 8 793 urban and rural Puerto Rican men aged 45-64 years. Rural men had a lower than average blood pressure, serum cholesterol, blood sugar, heart rate, and relative weight than urban men. They were more active physically, and although more of them smoked, they smoked fewer cigarettes than urban men. Urban men who had always lived in the same area had an incidence rate as low as rural dwellers, whereas recent rural migrants to urban areas had the highest rates of all. Statistical data are included. (Modified journal abstract.)

- 5496** Garros, B., Valin, J. *Mortalité par cause en Algérie; le cas de Tebessa. (Mortality by cause in Algeria; the case of Tebessa).* Population (Paris), 32(4-5), Jul-Oct 1977, 807-833. Fren.

Tebessa, Algeria—a small rural town considered medically representative of the country—boasts an unusually complete and more or less reliable record of mortality data for the years 1974 and 1975. This paper presents and analyzes the data, pointing out the leading causes of death for each age and sex and the gain in terms of increased life expectancy that could be anticipated if the principal causes of preventable death were eliminated. (HC-L)

- 5497** Gemert, W., Valkenburg, H.A., Muller, A.S. *Machakos Project studies: agents affecting health of mother and child in a rural area of Kenya; II: the diagnosis of measles under field conditions.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(3), Sep 1977, 303-313. Engl.

See also entries 4970, 5536, 5545, and 5592.

In this phase of Kenya's Machakos Project, the symptoms of children reported for measles were recorded on a checklist of clinical signs. The presence or absence of these symptoms in the measles group and a control group of Kenyan children was subjected to a statistical analysis and formed part of the final diagnosis. A comparison of the clinical diagnosis and the final diagnosis showed a considerable overlap of the two diagnoses. The conclusion was that the clinical diagnosis only is sufficient to reach adequate incidence rates in the case of a measles epidemic. Statistical data are included. (Modified journal abstract.)

- 5498** Goldsmith, R.J., Rothhammer, F., Schull, W.J. *Multinational Andean genetic and health program; III: ophthalmic disease and disability among the Aymara.* Bulletin of the Pan American Health Organization (Washington, D.C.), 13(1), 1979, 58-65. Engl. 20 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 1979.

Direct ophthalmoscopy and slit lamp microscopy performed on 706 residents of the coastal, sierran, and Andean highland zones of Chile failed to disclose unusual disorders of the eye or its adnexa attributable to the subject's biological origins. Much of the pathology that was encountered could be logically ascribed to the dust, persistent wind, low humidity, and ultraviolet radiation that are common in these areas. Retinal changes pathognomic of arteriosclerosis and hypertension were seen in all three ethnic groups and in all three ecological niches despite the reputed absence of cardiovascular disease among indigenous Andean peoples. Statistical data are included. (Modified journal abstract.)

- 5499** Grove, D.I., Valeza, F.S., Cabrera, B.D. *Bancroftian filariasis in a Philippine village: clinical, parasitological, immunological, and social aspects.* Bulletin of the World Health Organization (Geneva), 56(6), 1978, 975-984. Engl. 17 refs.

Also published in French and Spanish.

The distribution and effects of Bancroftian filariasis in 535 inhabitants of a Philippine village were investigated by means of clinical, parasitological, immunological, and socioeconomic assessments. A history of acute lymphatic inflammation and the presence of inguinal lymphadenopathy were common. Lymphatic obstructive disease, defined as leg edema, hydrocele, or an epididymal cyst, was more common in men than in women and increased progressively with age. Other findings are presented and the epidemiological factors that may have contributed to them are discussed. Statistical data are included. (Modified journal abstract.)

- 5500** Gueri, M., Jutsum, P., Hoyte, R. *Breast-feeding practices in Trinidad.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(4), 1978, 316-322. Engl. 17 refs.

Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*, 1979.

A 1974 study of breast-feeding practices in Trinidad indicates that, despite the evident advantages of breast-feeding, early abandonment of the practice is widespread. Within some 4 months of delivery, nearly half of the 418 infants studied had been completely weaned from the breast. A significant association was found between early bottle-feeding (before the 1st breast-feeding session) and early termination of breast-feeding. Statistical data are included. (Modified journal abstract.)

- 5501** Gujral, S., Chaudhry, A. *Essentiality of fecal examination for worm infestation in supplementary feeding programme.* Indian Journal of Nutri-

tion and Dietetics (Coimbatore, India), 14(11), Nov 1977, 341-344. Engl.

An Indian study of 64 preschool children reveals that the nutritional improvement of those who received both a food supplement and treatment for intestinal parasites was greater than that of untreated children who also received the supplement. Both supplemented groups gained more in weight and height than a control group of infested and non-infested children who did not receive any food supplement. Statistical data are included. (DP-E)

- 5502 Gupta, V., Saxena, S.** *Nutritional status of school children in rural and urban areas of Bikaner, West Rajasthan.* Indian Journal of Pediatrics (Calcutta, India), 44(357), Oct 1978, 301-308. Engl.

Anthropometric measurements of the height and weight of 1 000 urban and 1 000 rural schoolchildren aged 6-12 years from Rajasthan, India, are compared. Socioeconomic and dietary data were also obtained using a questionnaire. Nutritional deficiency diseases were more prevalent in rural children (33%) than in urban children (18.5%) and the most common diseases were vitamin A deficiency, anaemia, and vitamin B complex deficiency. The results indicate a direct correlation between malnutrition and poor socioeconomic status. Statistical data are included. (DP-E)

- 5503 Habte, D.** *Comparative trial of the use of fish protein concentrate and cow milk proteins in the treatment of kwashiorkor.* Ethiopian Medical Journal (Addis Ababa), 14(4), 1976, 151-158. Engl. Refs.

The primary objective of this study was to determine the nutritional value of a feeding mixture in which deodorized, defatted fish protein concentrate (FPC) was the major protein source. In an Ethiopian pediatric clinic, 72 infants and children aged 12-48 months with kwashiorkor were divided into two groups; during treatment, one received 68% of its protein from casein-lactalbumin (Casilan) and the other, 66% from FPC. The overall mortality was 29% and 35%, respectively. Patients taking FPC took longer to attain minimum weight, showed poorer weight gain, and had twice the incidence of severe diarrhea. Statistical data are included. (Modified journal abstract.)

- 5504 Hall, S.M., Whitcomb, M.A.** *Screening for gonorrhoea in family planning acceptors in a developing community.* Public Health (London), 92(3), May 1978, 121-124. Engl.

This Soweto (South Africa) study was carried out to determine the prevalence of gonorrhea in asymptomatic female family planning acceptors attending a clinic and to assess a new method of gonorrhea detection: Microcult-GC. The results showed that 20% of the women unknowingly had clinical signs of genital tract infection, the prevalence of culture-positive gonorrhea was 10.2% in the whole group and 17.5% in the group with clinical signs, Microcult-GC is a quick and reliable method of detecting gonorrhea that would be useful in large-scale

screening programmes, and less than half the patients returned for treatment. (Modified journal abstract.)

- 5505 Hawley, T.G., Jansen, A.A.** *Weights and heights of Fijians from coastal and inland villages.* New Zealand Medical Journal (Wellington), 87(605), 8 Feb 1978, 86-90. Engl.

In 1961, a survey was taken of the population of Wainimbuka, an inland village of Fiji, and anthropometric measurements were compared with those of coastal populations obtained in earlier surveys. Differences were slight, but generally coastal dwellers, especially children, were taller and heavier. There was more borderline malnutrition among inland children and inland adults were less likely to be obese than their coastal counterparts. Results of the surveys for each age group are presented in tabular form. (FM)

- 5506 Hegsted, D.M.** *Protein-calorie malnutrition.* American Scientist (New Haven, Conn.), 66(1), 1978, 61-65. Engl. Refs.

The author maintains that too much importance has been attributed to protein in what is called protein-calorie malnutrition and that the role of neither energy nor protein is clearly defined. More knowledge is required about energy requirements, adaptations to high or low intakes of energy, and the relationship between energy intake and protein requirement. The case is cited of Kerala, India, where life expectancy is almost equal to that of developed countries despite an extremely low *per capita* food consumption; the high literacy rate, land reform, cooperative food programmes, and availability of health services seem to compensate for poor diet. (DP-E)

- 5507 Heimgartner, E.** *Observaciones epidemiológicas y clínicas de una epidemia de tos ferina en la región Mazahua, Estado de México. (Epidemiological and clinical observations of a whooping cough epidemic in the Mazahua region of Mexico).* Revista de Investigación en Salud Pública (Mexico City), 37(2) Apr-Jun 1977, 101-111. Span.

Prior to 1975, few Mexican Indians were immunized against whooping cough; from April 1975-April 1976, 159 cases of the disease were encountered at the Mazahua Hospital, Santa Ana Nichi, Mexico. This paper describes the clinical features and epidemiology of the outbreak, focusing on its seasonal variation, the age structure of its victims, and the severity, prognosis, and complications of its manifestation. Two tables and four graphs of data are included. (HC-L)

- 5508 Hiatt, R.A., Cline, B.L., Knight, W.B.** *Limitations of the intradermal test for schistosomiasis mansoni: experience from epidemiologic studies in a Puerto Rican community.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(3), May 1978, 535-541. Engl. 16 refs.

The intradermal reaction with *Schistosoma mansoni* adult worm antigen was evaluated as an epidemiologic tool in an endemic Puerto Rican community where the

prevalence of infection was 36%. Subcutaneous forearm injections were given to 296 persons whose stools were also examined using a formal-ether concentrated method; 43% were positive according to the 1st test and 48% according to the 2nd. Because of unsatisfactory sensitivity and specificity, the intradermal method may overestimate the prevalence of infection when rates are low and underestimate it when rates are high. For its proper interpretation, complementary parasitologic data from stool surveys are required. Statistical data are included. (Modified journal abstract.)

5509 Hopkins, D.R., Flórez, D. Pinta, yaws, and venereal syphilis in Colombia. International Journal of Epidemiology (Oxford, UK), 6(4), 1977, 349-355. Engl. 34 refs.

Three treponematoses (yaws, pinta, and venereal syphilis) have been endemic in Colombia for centuries. From 1950-1953, an intensive yaws campaign reached 111 000 patients and 125 000 contacts with penicillin and, by 1974, the number of reported cases declined from 2 473-22; at the same time, pinta cases fell from 7 214-149. Syphilis, however, increased from 9 392 cases in 1954 to 21 478 in 1974 after an initial fall during the yaws campaign. It is known that these three diseases give variable cross protection, but it is not yet possible to say whether syphilis is replacing yaws and pinta now that the post-campaign generation is growing up. (Modified journal abstract.)

5510 Hoxter, S.I. de, Ruvinsky, R.O., Gariboto, L., Moyano Vara, A. Lactancia materna; investigación operativa en dos países limítrofes. Archivos Argentinos de Pediatría (Buenos Aires), 74(1), 1976, 9-16. Span. 13 refs.

Results of a survey of 731 children aged 6 months-4 years showed that, in Argentina, 11.4% of poor children and 24.9% of richer children had never been breast-fed; figures for Chilean children were 10.7% and 15.8%, respectively. Among 493 children from Buenos Aires, the incidence of malnutrition in the 1st 6 months of life was 15.5% for those breast-fed for less than 1 month (group 1) and 3.85% for those breast-fed for over 6 months. Acute digestive or respiratory conditions also developed in 63.4% of group 1 and 17.1% were admitted to hospital. With longer breast-feeding both percentages were greatly reduced. Statistical data are included. (Modified journal abstract.)

5511 Huffman, S.L., Alauddin Chowdhury, A.K., Chakraborty, J., Mosley, W.H. Nutrition and post-partum amenorrhoea in rural Bangladesh. Population Studies (London), 32(2), Jul 1978, 251-260. Engl. Refs.
See also entry 5512.

A cross-sectional survey of 2 048 breast-feeding women in Bangladesh was conducted in 1975 to explore factors affecting the duration of postpartum amenorrhea. Information on menstrual status, infant supplementation, socioeconomic status, and anthropometric measurements was collected for lactating women with infants aged 13-21 months. The median length of amenorrhea

was 18 months, possibly longer in older or malnourished women and those of lower socioeconomic status. However, the pattern of breast-feeding played the major role in determining the length of lactational amenorrhea in this rural population. Statistical data are included. (Modified journal abstract.)

5512 Huffman, S.L., Alauddin Chowdhury, A.K., Mosley, W.H. Postpartum amenorrhea: how is it affected by maternal nutritional status? Science (Washington, D.C.), 200(4346), 9 Jan 1978, 1155-1157. Engl. 12 refs.
See also entry 5511.

The average length of postpartum amenorrhea reported by breast-feeding women in rural Bangladesh in 1975 was 18-20 months. Its duration was found to be only slightly related to maternal nutritional status. There was no evidence of a threshold of weight necessary for the resumption of menstruation. Factors related to the duration of postpartum amenorrhea were maternal age, socioeconomic status, and supplemental feeding of the infant. Statistical data are included. (Modified journal abstract.)

5513 Ikic, D. ed(s). Yugoslav Academy of Sciences and Arts, Zagreb. Institute of Immunology, Zagreb. Proceedings; Symposium on Stability and Effectiveness of Measles, Poliomyelitis and Pertussis Vaccines. Zagreb, Yugoslav Academy of Sciences and Arts, 1976. 259p. Engl. Refs.
Symposium on Stability and Effectiveness of Measles, Poliomyelitis, and Pertussis Vaccines, Zagreb, Yugoslavia, 28-29 Sep 1976.

This conference report is divided into five chapters. An introductory paper discusses the need for stable vaccines in developing countries. The 2nd chapter presents five papers on poliomyelitis vaccines, including storage problems, effectiveness in warm climates and at different temperatures, and use of sucrose. Chapter 3 contains nine papers on vaccines for measles that cover factors affecting its stability and the use of freeze-dried vaccines. The 4th chapter examines the pertussis vaccines and nine papers study the effectiveness of immunization programmes against whooping cough, the stability of diphtheria-tetanus-pertussis vaccines, and methods of vaccine preparation. Additional papers on cell invasiveness complete the report. (FM)

5514 Ingenbleek, Y., Visscher, M. de, Beckers, C. Fonction thyroïdienne dans la malnutrition protéino-calorique chez l'enfant en bas âge. (Thyroid function in young children with protein-energy malnutrition). Annales d'Endocrinologie (Paris), 39(2), Mar-Apr 1978, 147-148. Fren.

Iodine kinetics and thyroid function were investigated in 68 Senegalese children aged 18-30 months who were suffering from kwashiorkor and compared to a control group of 30 healthy children of the same age. Serious impairment of thyroid function was revealed in the malnourished group, characterized by reduced iodine uptake and clearance, a 50% decline in the hormonal secretion rate, and low levels of total and free thyroxine in

serum. The decline in triiodothyronine was thought to be due partly to defective conversion of thyroxine. In spite of this primary hypothyroidism of nutritional origin, there was no hypersecretion of thyrotropin by the patients. (Modified journal abstract.)

5515 Intengan, C.L., Roxas, B.V., Bautista, C.A., Alejo, L.G. Studies on protein requirement of Filipinos. *Philippine Journal of Nutrition* (Manila), 29(3), Jul-Sep 1976, 94-98. Engl. 19 refs. A protein intake study in the Philippines involved 8 women and 14 men aged 21-30 years. Before the study, it was established that the customary diets of the subjects provided an inadequate amount of protein. Using foods commonly eaten by Filipinos, two diets were prepared, a low protein diet and a repletion diet with higher protein levels, and followed alternately for 30-50 days. The relationship between nitrogen balance and protein levels was studied. Results indicated that the minimum protein requirement was 1.12 g protein/kg bodyweight. Factors such as parasitism, tuberculosis, pneumonia, and gastrointestinal diseases, all common in the Philippines, greatly increase protein requirements. (FM)

5516 Itoua N'Gaporo, A., Coulm, J. Bilharziose intestinale en République Populaire du Congo; considérations épidémiologiques à partir des cas déclarés entre 1952 et 1976. (Intestinal schistosomiasis in the People's Republic of the Congo; epidemiological features derived from statistics collected from 1952 to 1976). *Médecine Tropicale* (Marseille, France), 38(5), Sep-Oct 1978, 538-546. Fren. 50 refs.

Using statistics collected over a 20-year period, the authors study the epidemiology of intestinal schistosomiasis in the Congo. Following a brief review of studies before 1952, they present and analyze data from 1952-1976, showing the incidence of the disease, its geographical distribution, its relationship with urinary schistosomiasis, and its frequency compared with neighbouring countries. In conclusion, they outline the explanations for the comparative rarity of the disease in the Congo and offer suggestions to prevent a future epidemic. Statistical data are included. (FM)

5517 Jain, P.S., Abengowe, C.U. Disease pattern among university students in savanna region of Nigeria. *Public Health* (London), 92(3), May 1978, 131-135. Engl.

An analysis of the 1973-1974 health records of 2 492 students at Ahmadu Bello University health centre, Zaria, Nigeria, revealed a total of 18 852 consultations, an average of 7.5 consultations per student per semester. Venereal diseases together with sex problems formed the commonest condition with 3 242 (17%) consultations, followed by psychiatric (15%), respiratory (14%), and specific infections and parasitic diseases (13%). The various factors contributing to the development of psychiatric problems in students, including aspects of climatic and social environment, are discussed. The need for special provisions for lessening the incidence of venereal diseases and investigating possible drug addiction

and alcoholism is emphasized. (Modified journal abstract.)

5518 Jansen, A.A. Malnutrition and child feeding practice among the Gilbertese (including information on pregnant and lactating women and attitudes towards family planning). *Journal of Tropical Pediatrics and Environmental Child Health* (Kampala), 23(4), Aug 1977, 161-184. Engl.

In 1971, a study was carried out to assess the nutritional status of infants, preschoolers, and school children on Betio and Tabiteuea-North, members of the Gilbert Islands in the South Pacific. The study included anthropometric and clinical examinations and haemoglobin determinations, plus a survey of child feeding habits. The findings indicated a prevalence of vitamin A and riboflavin deficiencies, low haemoglobin levels, and borderline malnutrition and growth retardation peaking in the 2nd year. The last was attributed to delayed introduction of solids into the child's diet. Twenty-nine tables of data are set forward and discussed and some information on customs, taboos, and attitudes toward family planning is given. (HC-L)

5519 Joo, I., Csizer, Z. Preparation and laboratory testing of plain and aluminium hydroxide-adsorbed cholera vaccines used in a field trial in Indonesia. *Bulletin of the World Health Organization* (Geneva), 56(4), 1978, 615-618. Engl. 10 refs.

Also published in French and Spanish; see also entry 5580.

In preparation for an Indonesian field trial, a plain cholera vaccine was compared to an aluminium hydroxide-adsorbed type. Preparation methods using the Inaba NIH 35 A 3 and Ogawa NIH 41 serotypes of *Vibrio cholerae* are described. Results of tests on mice showed that the antigenicity of the Inaba and Ogawa components of both vaccines met WHO requirements. The antigenicity of the Inaba component of both vaccines was about the same, while the antigenicity of the Ogawa component of the plain vaccine appeared to be somewhat higher. In the antibody production test, the adsorbed vaccine elicited a higher and longer-lasting immune response than the plain vaccine. Statistical data are included. (Modified journal abstract.)

5520 Jordan, P., Barnish, G., Bartholomew, R.K., Grist, E., Christie, J.D. Evaluation of an experimental mollusciciding programme to control Schistosoma mansoni transmission in St. Lucia. *Bulletin of the World Health Organization* (Geneva), 56(1), 1978, 139-146. Engl. 10 refs.

Also published in French and Spanish.

Surveys conducted in St. Lucia after a 4-year schistosomiasis disease and pest control programme showed that the incidence of new infection in children aged 0-10 years fell from 22%-4.3%, while in a control area the incidence remained at 20%. With reduced transmission over 4 years, the prevalence of infection in children examined in 1971 and 1975 fell from 34%-23%. This fall in prevalence and intensity of infection led to a reduction of 66%

in the index of potential contamination. The overall annual cost of the programme was US\$3.24 *per capita*. Statistical data are included. (Modified journal abstract.)

- 5521 Jordan, P., Bartholomew, R.K., Unrau, G.O., Upatham, E.S., Grist, E.** *Further observations from St. Lucia on control of Schistosoma mansoni transmission by provision of domestic water supplies.* Bulletin of the World Health Organization (Geneva), 56(6), 1978, 965-973. Engl.

Also published in French and Spanish.

Individual households in five settlements were provided with piped water in a pilot project to investigate the effect on *Schistosoma mansoni* transmission in St. Lucia. Control settlements in the same valley received water through a standpipe system. The incidence of *S. mansoni* infection among children increased in the control area and gradually decreased in the experimental area due to reduced water contact and less contamination of the river and its banks. It is suggested that a piped water supply be considered as a method of schistosomiasis control but that the cost should not be debited only to the control of this disease, since a clean water supply has other medical and social benefits. Statistical data are included. (Modified journal abstract.)

- 5522 Kaba, A.S., Luvwezo, M., Nzuzi, K., Thienpont, D.** *Traitement anthelminthique périodique d'enfants d'âge scolaire au Zaïre. (Periodic anthelmintic treatment of schoolchildren in Zaïre).* Annales de la Société Belge de Médecine Tropicale (Brussels), 58, 1978, 241-249. Fren. 11 refs.

A group of 176 schoolchildren in Zaïre participated in a trial of trimestrial anthelmintic chemotherapy. Levamisole or mebendazole were administered either separately or simultaneously and treatment was repeated 3 times with a 3-month interval during a 15-month follow-up period. Levamisole is particularly active in ascariasis and encylostomiasis. Mebendazole is effective in trichocephalosis and seems to be more lasting. The two anthelmintics are synergistic and appear to have a beneficial effect on body weight and blood count as well (interaction between parasitosis and nutritional status). (Modified journal abstract.)

- 5523 Kageruka, P., Kazyumba, L., Tackaert, M.C., Lokombe, B.** *Enquête sero-parasitologique du paludisme à Kinshasa. (Sero-parasitological survey of malaria in Kinshasa).* Médecine d'Afrique Noire (Paris), 26(1), Jan 1979, 53-58. Fren. 17 refs.

A sero-parasitological survey of malaria cases was undertaken in two zones of the Kinshasa area, Zaïre. Using the indirect immunofluorescence method of diagnosis, the authors found a higher incidence of the disease in the urban zone, where contagion was more likely and where conditions were more favourable for the vector than in the semi-rural zone. Comparisons are also drawn between the prevalence of antibodies in the populations of the two areas and between results obtained from parasitological and serological tests. (FM)

- 5524 Kalimo, E.** John Hopkins University, Baltimore, Md. *World Health Organization/ international collaborative study of medical care utilization; occasional reports-reduction of WHO/ICS-MCU questionnaire data.* Springfield, Va., National Technical Information Service, 1972. 167p. Engl. 18 refs.
See also entry 4960.

This report presents the main results of reduction of WHO/ICS-MCU questionnaire data in order to establish a frame of reference for the authors of the main study report. The main purpose of reduction was to evaluate and determine variables for statistical analyses in the main report, which does not attempt comparisons between study areas. The results of data reduction offer information of methodological and substantive interest about various indicators of medical care use and its determinants in different health services systems. Areas covered in the study include: utilization of physicians, dentists, ophthalmology services, hospitals, and medicine; morbidity; etc. (DP-E)

- 5525 Kardjati, S., Kusin, J.A., de With, C., Sudibia, I.K.** *Feeding practices, nutritional status and mortality in pre-school children in rural East Java, Indonesia.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1978, 359-371. Engl. 20 refs.

During the dry seasons of 1975 and 1976, two nutrition surveys were carried out in Indonesia to assess the geographical prevalence, magnitude, and severity of nutritional deficiencies, especially among mothers and children. In this paper, child-feeding practices, nutritional status of preschool children, and child mortality are reported. Breast-feeding was commonly practiced until children were 24 months of age and, although supplementary food was introduced as early as the 1st week, it was insufficient to maintain adequate growth after the age of 6 months. Statistical data on malnutrition and mortality are also included. (DP-E)

- 5526 Khandekar, M.** *Rural child nutrition; some areal comparisons.* Health and Population (New Delhi), 1(1), Jan-Mar 1978, 12-23. Engl.

In order to collect data for nutrition planning, a nutritional survey was conducted of children in agricultural, coastal, and tribal villages in India. Information was collected on weaning, diet, eating habits, nutritional status, socioeconomic situation, and whom the children's mother normally consulted for nutrition advice. The results indicate that, while mothers in the coastal villages show a better understanding of nutrition, children in the agricultural villages are better nourished. It is concluded that an overall nutrition programme must include both nutrition rehabilitation and nutrition education. Statistical data are included. (DP-E)

- 5527 Kishore, N., Mathur, Y.C., Qureshi, S., Perashad, B.** *Study of physical and sexual growth of preadolescent and adolescent children of rural Hyderabad and their knowledge attitudes towards human reproduction and family plan-*

ning. *Indian Pediatrics* (Calcutta, India), 15(2), Feb 1978, 147-154. Engl.

Physical and sexual growth was examined in 200 adolescent and preadolescent children in rural Hyderabad, India. Their knowledge of human reproduction and attitudes to family planning were assessed and the source of knowledge noted. Girls started pubescence 1 year earlier than boys and attained menarche at the age of 13-15 years. Girls also showed an increase in height and weight compared to boys before they attained puberty. A total of 80% of the girls and 50% of the boys aged more than 11 years had some knowledge of sexual growth. In most cases, such information was obtained from friends and village family planning programmes rather than from older family members or teachers. Statistical data are included. (Modified journal abstract.)

- 5528 Kishore, N., Gupta, A.K.** *Chemotherapy in leprosy*. Current Medical Practice (Bombay, India), 20(10), Oct 1976, 467-469. Engl.

The dosage, derivation, and effectiveness of drugs that have been used to treat leprosy are described. Commonly-used drugs include thioureas, Marcaptan derivatives, Isonicotonic Acid Hydrazide and Thiosemicarbazone, long-acting sulphonamides, and antibiotics; Phenazine Di compound, Oxiazalone compound, Macrocyclon, Thalidomide, Antigen Mareanium, and Dia-Cetyl Diamino-Diphenyl-Sulphone are among new drugs that have recently been developed. There are also 29 Ayurvedic preparations and other traditional remedies. (DP-E)

- 5529 Klein, R.E., Lasky, R.E., Yarbrough, C., Habicht, J.P., Sellers, M.J.** *Relationship of infant/caretaker interaction, social class and nutritional status to developmental test performance among Guatemalan infants*. In Leiderman, P.H., Tulkin, S.R., Rosenfeld, A., eds., *Culture and Infancy; Variations in the Human Experience*, London, Academic Press, Child Psychology Series, 1977, 385-403. Engl. Refs.

For complete document see entry 5430.

In order to study the effects of malnutrition on mental development, data on nutritional status, family socioeconomic status, and psychological test performances were collected for some 64 Guatemalan infants. Caretaker/infant interaction patterns were measured for the children at either age 8, 12, or 16 months; the variables examined included total physical contact, location of the mother, whether or not the child plays alone, total positive vocalization by the infant, total caretaker vocalization, and total verbal and social interaction. The results are analyzed and presented as statistical data. Psychological test scores were found to improve with nutritional rehabilitation. (DP-E)

- 5530 Kloos, H., Polderman, A.M., Desole, G., Lemma, A.** *Haematobium schistosomiasis among seminomadic and agricultural Afar in Ethiopia*. Tropical and Geographical Medicine (Haarlem, Netherlands), 29(4), 1977, 399-406 Engl. 12 refs. High levels of schistosomiasis transmission may occur

at scarce permanent water collections where humans, intermediate hosts, and parasites are concentrated. As many African governments increasingly emphasize water development projects and the settlement of pastoral nomads on irrigation farms, data about the occurrence of the disease among these people assumes considerable importance. This paper describes a study of some aspects of the epidemiology of *S. haematobium* infections among pastoral and agricultural Afar in the Awash Valley of Ethiopia, focusing on the geographical distribution of the parasite and its intermediate host and on sex differences in infection. (HC-L)

- 5531 Konner, M.** *Infancy among the Kalahari desert san*. In Leiderman, P.H., Tulkin, S.R., Rosenfeld, A., eds., *Culture and Infancy; Variations in the Human Experience*, London, Academic Press, Child Psychology Series, 1977, 287-328. Engl. Refs.

For complete document see entry 5430.

A 1969-1971 study of infancy among nomadic tribesmen in Botswana examines typical infant positions and the infant sling, nursing and weaning, physical contact of the infant with the mother and other caretakers, contact with other persons, nonphysical interaction in infancy, neuromotor maturation and neuromotor learning, cognitive development in early infancy, comparative data on the density of social context and the course of mother-infant interactions, and mother-infant contact from an evolutionary perspective. Statistical data are included. (DP-E)

- 5532 Koplan, J.P., Azizullah, M., Foster, S.O.** *Urban hospital and rural village smallpox in Bangladesh*. Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1979, 355-358. Engl.

Smallpox mortality at the Infectious Diseases Hospital in Dacca, Bangladesh, from 1972-1973 was 46%. To determine if this was the actual range within the population, data were compared to those collected from village populations in Noakhali District. Age/sex adjusted smallpox mortality for the rural population was 23:100 cases compared to 52:100 for the hospital population. Analysis of the difference identified a selection bias of the hospital for severe disease. Statistical data are included. (DP-E)

- 5533 Kraut, H., Kreysler, J., Lal, K., Mndeme, K., Moshi, H.** *Rehabilitation of undernourished children in Tanzania using locally available food*. Ecology of Food and Nutrition (London), 6, 1978, 231-242. Engl. Refs.

The catch-up growth of 49 moderately malnourished Tanzanian children that resulted from an 88-week nutrition programme is assessed and presented as statistical data. Food consisted of locally available cereals (maize), legumes (beans), and vegetables for 74 weeks, supplemented by animal protein for 14 weeks. The children stayed in a day care centre for 6 days a week and received necessary medical treatment. The results indicated that 41 children grew faster than, and 6 at a rate about

parallel to, the Baganda standard during the 1st period; when meat was added to the diet, the 2nd group of children surpassed the Baganda standard, while the growth rate in the 1st group did not accelerate. (DP-E)

- 5534 Kuizon, M.D., Natera, M.G., Aguilar, C.G., Ysip, T.R., Malgapo, J.A.** *Evaluation of vitamin A nutritional status of specific population groups.* Philippine Journal of Nutrition (Manila), 31(1), Jan-Mar 1978, 27-35. Engl. 19 refs.

Surveys of vitamin A deficiency were carried out in the Philippines on three groups: children aged 0-6 years, schoolchildren aged 7-12 years, and a random selection of all ages. Serum levels of vitamin A and carotene were used to assess nutritional status. The study showed that preschoolers, schoolchildren, and the elderly were most likely to experience vitamin A deficiency. For children, this may indicate a low consumption of carotene-rich foods such as green leafy and yellow vegetables and yellow fruit. For the elderly, it could indicate reduced utilization of fat-soluble substances. There was no sex difference for serum vitamin A levels, but serum carotene was higher in females. Statistical data are included. (FM)

- 5535 Laditan, A.A., Reeds, P.J.** *Study of the age of onset, diet and the importance of infection in the pattern of severe protein-energy malnutrition in Ibadan, Nigeria.* British Journal of Nutrition (London), 36(3), 1976, 411-419. Engl. 16 refs.

A study of 50 Nigerian children with protein-calorie malnutrition indicates that it is possible that the history of growth in the 1st year of life influences the final form of nutrition-related disease the child will have: values obtained for the deficit in length for age suggested that the children with marasmus had been undernourished from birth, while the children with kwashiorkor had apparently grown normally until the age of 10 months. Also, their similar dietary histories but dissimilar histories of infection suggest that recurrent diarrhea was at least partially responsible for the chronic undernutrition of the marasmic children. Statistical data are included. (Modified journal abstract.)

- 5536 Leeuwenburg, J., Gemert, W., Muller, A.S., Patel, S.C.** *Machakos Project studies: agents affecting health of mother and child in a rural area of Kenya; VII: the incidence of diarrhoeal disease in the under-five population.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1978, 383-391. Engl. Refs.

See also entries 4970, 5497, 5545, and 5592.

The outcome of 3 years of fortnightly diarrhea surveillance of approximately 4 000 children aged less than 5 years in a Machakos, Kenya, project is described. The incidence of diarrhea in children aged 0-5 months, 6-11 months, and 12-23 months, who were reported or observed to be ill during a 2-week period, was 3.4%, 5.6%, and 3.4%, respectively. When mothers were questioned about their children's health, there was a four- to seven-fold increase in the incidence of diarrhea, which appears to be a common condition that is not necessarily consid-

ered an illness by the mother. Statistical data are included. (DP-E)

- 5537 MacCorquodale, D.W., Rondón de Nova, H.** *Family size and malnutrition in Santo Domingo.* Public Health Reports (Rockville, Md.), 92(5), Sep-Oct 1977, 453-457. Engl. 15 refs.

To assist in identifying the causes of malnutrition in preschool children in the Dominican Republic, 82 women with malnourished children were compared to a control group of 82 women with well-nourished children of similar age, sex, and neighbourhood. The women were also matched in age, place and length of residence, and educational level. It was found that the control group had a significantly higher parity, fewer living children, and had undergone one or more spontaneous or induced abortions. Income levels were slightly higher in the control group, which could account for the difference in parity and in nutritional status. Statistical data are included. (FM)

- 5538 Magnol, R., Obes Polleri, J.** *Grupos de riesgo del recién nacido de bajo peso. (Groups at risk among low weight newborns).* Archivos de Pediatría del Uruguay (Montevideo), 48(2), 1977, 89-99. Span. 12 refs.

A study of 6 500 low-birth-weight (below 2 500 g) newborns in Montevideo, Uruguay, revealed four distinct at-risk groups: the small-for-dates, with a mortality of 14%; the preterm, with a mortality of 44.8%; the preterm below the 33rd gestational week, with a mortality of 61.8%; and the high risk preterm below 33 weeks and 1 750 g with a mortality of 79.8%. Twelve tables of data from the study are presented and discussed. (HC-L)

- 5539 Mahieu, J.M., Muller, A.S., Voorhoeve, A.M., Dikken, H.** *Pertussis in a rural area of Kenya: epidemiology and a preliminary report on a vaccine trial.* Bulletin of the World Health Organization (Geneva), 56(5), 1978, 773-780. Engl. 12 refs. Also published in French and Spanish.

A pertussis surveillance programme has been underway in the district of Machakos, Kenya, since April 1974. Home visits every 2 weeks to approximately 4 000 households permit the collection of epidemiological data. The present report describes the epidemiology of pertussis before and after the introduction of mass immunization, examines the design of a controlled vaccine trial, and studies the antibody response to two and three doses of DPT vaccine. Results showed that this reduced number of immunizations may provide sufficient protection, although further studies are required. Statistical data are included. (FM)

- 5540 Mata, L.J.** *Children of Santa Maria Cauque: a prospective field study of health and growth.* Cambridge, Mass., Massachusetts Institute of Technology, International Nutrition Policy Series, 1978. 395p. Engl. Refs.

This book presents a comprehensive interpretation of a 9-year longitudinal study of the role of nutrition and

infection during pregnancy and early childhood. The subjects are 45 Mayan children from a small Guatemalan highland village. Separate sections cover the foundation of the study, the study plan and procedure, results and synopsis, interventions, priorities, and future alternatives. Appendices contain lists of staff, advisors and consultants, codes, variables, and anthropometric data. There are an index and copious statistical data. (RMB)

- 5541 Maxwell, S.** *Food aid for supplementary feeding programmes; an analysis.* Food Policy (London), 3(4), Nov 1978, 289-298. Engl. Refs.

Supplementary feeding programmes such as the Food for Peace Program (USA) are one outlet for food aid to developing countries, although evaluation proves that they are neither cost-effective nor especially effective in nutritional terms. However, there have been some non-nutritional benefits such as subsidies to family income, increased school attendance, potential for nutrition education, and improved relationships between clients and clinics, although these benefits may be off-set by non-nutritional costs (i.e., staff time spent, increased dependence on imports, and a decline in breast-feeding). The author suggests that local food should be used because of lower cost and greater potential for teaching new food habits and that food-for-work projects offer a higher return on food aid. (Modified journal abstract.)

- 5542 Melnick, J.L.** *Advantages and disadvantages of killed and live poliomyelitis vaccines.* Bulletin of the World Health Organization (Geneva), 56(1), 1978, 21-38. Engl.

Also published in French and Spanish.

Decision-making concerning the use of poliomyelitis vaccine in WHO's immunization programme, especially in developing countries, must be based on an understanding of the disease's epidemiology in different parts of the globe. Even with two available vaccines, poliomyelitis has by no means been eradicated. In developing countries, wild polioviruses will continue to be a threat until thorough immunization is established and maintained. Therefore, the advantages and disadvantages of each kind of vaccine need to be weighed with respect to the setting in which it will be used. (Modified journal abstract.)

- 5543 Molineau, L., Cornille-Brögger, R., Mathews, H.M., Storey, J.** *Longitudinal serological study of malaria in infants in the West African savanna; comparisons in infants exposed to, or protected from, transmission from birth.* Bulletin of the World Health Organization (Geneva), 56(4), 1978, 573-578. Engl.

Also published in French and Spanish.

Two Nigerian infant populations, one exposed to intense malaria transmission and one protected, were compared by six serological tests. The tests showed that, in both populations, levels of malarial antibodies decreased in early life; these tests apparently detect maternal antibodies. In the unprotected population, this decrease was followed by an increase, closely associated with the parasitological findings, while in the protected population the

decrease continued to very low levels. The effectiveness of the various tests is discussed. Statistical data are included. (Modified journal abstract.)

- 5544 Monckerberg, F., Yañez, E., Ballester, D., Merchack, N., Jarpa, S.** *Desarrollo de una fórmula alimentaria (Fortesan) para pre-escolares. (Development of a food formula (Forestan) for pre-school children).* Archivos Latinoamericanos de Nutrición (Caracas), 26(4), Dec 1976, 426-466. Span. 17 refs.

Although milk is distributed free in Chile to children aged up to 15 years, child malnutrition is still a problem as a result of misuse of the milk, poor sanitary conditions, and a high incidence of lactose intolerance. In a number of studies, Fortesan—a protein mixture consisting of 70% extruded soy bean-wheat blend, 25% non-fat dried milk, and 5% cocoa (23% protein in all)—compared well with milk in terms of acceptance, absorption rate, retention rate, protein efficiency ratio, net protein utilization, and results (in terms of weight gain). Moreover, Fortesan is less expensive than milk and can be manufactured from local products. Its industrial production is highly recommended. Statistical data are included. (HC-L)

- 5545 Muller, A.S., Schulpen, T.W., Gemert, W., Valkenburg, H.A., Voorhoeve, A.M.** *Machakos Project studies: agents affecting health of mother and child in a rural area of Kenya; III: the epidemiology of measles.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(4), Dec 1977, 428-440. Engl. Refs.

See also entries 4970, 5497, 5536, and 5592.

From April 1974-March 1976, 12 fieldworkers in a Machakos, Kenya, project carried out measles surveillance by making fortnightly home visits to some 24 000 inhabitants in 4 000 scattered households. The estimated attack rate for the susceptible population aged 0-15 years was 13.5% with 15% of cases occurring in infants aged less than 1 year. The estimated fatality rate was 6.5%; mortality was highest in children aged 1-2 years. For children aged 0-15 years, measles accounted for 16.7% of all deaths. The epidemiology of measles in the area is discussed. Statistical data are included. (Modified journal abstract.)

- 5546 Nagabhushanam, B.** *Study on brucellosis in human population.* Bombay Hospital Journal (Bombay, India), 19(3), 1977, 133-137. Engl.

An analysis of blood samples collected from possible cases of brucellosis in eight villages in West Bengal, India, indicated that a brucellosis reservoir existed in both the human and the bovine population of the area. Most of the infected patients kept or were associated with cattle; although goats can also transmit the disease, there was no history of infection from goats. Statistical data are included. (DP-E)

- 5547 Nutrition Reviews, New York.** *Evaluation of the impact of mothercraft centers on therapy and prevention of malnutrition.* Nutrition Reviews (New York), 36(9), Sep 1978, 275-278. Engl.

In 1964, an innovative and pragmatic approach to nutrition therapy and education was launched in Haiti with the establishment in a number of rural villages of mothercraft centres that are run by local women with 10 years general education, 4 weeks training, and 4 weeks apprenticeship. Village mothers are taught nutrition education in an informal manner, mainly by demonstrations using local foods, and malnourished children are cared for at the centre for 6 days a week. Various evaluations of different centres show that this nutrition programme has had great impact on the nutritional status of village children. (DP-E)

- 5548 Odiase, G.I.** *Ten leading causes of death among in-patients of the University of Benin Teaching Hospital in the year 1974.* Nigerian Medical Journal (Lagos), 8(3), May 1978, 242-248. Engl.

The aim of this study was to identify the leading causes of death among inpatients at the University of Benin Teaching Hospital and determine the death rate among 1974 admissions. Analysis of admissions and autopsy records revealed that 284 (75.3%) of 415 deceased inpatients died of pneumonia, heart disease, prematurity, tetanus, viral hepatitis, anaemia, hypertension, meningitis, intestinal obstruction, and cerebrovascular disease. The 1974 overall mortality among inpatients was 70:1 000. Statistical data are included. (DP-E).

- 5549 Oemijati, S., Partono, F., Hudojo, Hadi, T.R., Clarke, M.D.** *Brugia malayi in Kresek, West Java, Indonesia: the effect of environmental changes on filarial endemicity.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1979, 301-304. Engl.

In a 1970 survey in Kresek, West Java, Indonesia, 813 inhabitants of six villages were examined for filariasis. Eight had microfilaremia and there was one case of elephantitis. Compared with results from 10 years earlier, there was a marked decrease in the microfilarial rate. Since no drug treatment, insecticide application, or dramatic population movement had occurred, the decrease was attributed to the development of a well-organized irrigation system and the conversion of the swamps into ricefields, which destroyed many breeding sites for the *Mansonia* mosquitoes. Statistical data are included. (Modified journal abstract.)

- 5550 Ogedengbe, O., Adeniji, F.A.** *Quality assessment of a typical rural water supply system in Nigeria.* Indian Journal of Medical Research (New Delhi), 67, Apr 1978, 638-646. Engl. 9 refs.

A Nigerian study of several rural communities revealed that local water supply systems had a coliform count as high as 11 000:100 ml of water sample. Since WHO standards limit allowable coliform count to 1:100 ml, these water supplies must be considered unsafe for human consumption. This is confirmed by local hospital records, which indicate a high incidence of cholera, typhoid fever, infectious hepatitis, guinea worm, etc. The study also showed that, by adding approximately 10 spoonfuls of chlorine bleach to a 10-litre jar of water

taken from these sources, the water could be made biologically safe. Statistical data are included. (DP-E)

- 5551 Oyarebu, K.A.** *Age distribution of patients attending the out-patient department University of Benin Teaching Hospital: a retrospective study.* Public Health (London), 93(1), Jan 1979, 42-45. Engl.

A descriptive epidemiology of age distribution in the outpatient department in 1974 at a Benin teaching hospital was undertaken from January-July 1976 on the basis of the hospital's medical records. Analysis of the patients' age distribution showed that, of a total of 58 192 patients: 24 810, or 43%, were aged 0-4 years; 6 113, or 11%, 5-9 years; 4 583, or 8%, 20-24; and 4 040, or 6%, 25-29. Only 1% of patients was between the ages of 65-75 years. Statistical data are included. (DP-E)

- 5552 Pamba, H.O., Roberts, J.M.** *Schistosomiasis in and around Lake Naivasha, Kenya: seven years surveillance.* East African Medical Journal (Nairobi), 56(6), Jun 1979, 255-262. Engl. 20 refs.

This Kenyan epidemiological study reveals that no transmission of schistosomiasis appears to take place around Lake Naivasha despite the fact that conditions are ideal for encouraging the spread of the disease. Factors that seem to discourage transmission include low lake temperatures, high alkaline pH, good farm hygiene, restricted access to the lake because of the papyrus belt, and a limited number of carriers. Statistical data are included. (DP-E)

- 5553 Pan American Health Organization, Washington, D.C.** *National food and nutrition survey of Guyana.* Washington, D.C., Pan American Health Organization, Scientific Publication No. 323, 1976. 106p. Engl.

Following introductory chapters on methodology, recommendations, and background information, the results of the survey are organized into 10 chapters. Sampling methods are explained and characteristics of Guyanese households described. Chapter 6 outlines the nutritional status of the population and chapter 7 studies infant feeding practices. Food production is discussed, followed by food consumption habits. Chapter 10 examines the ecological factors related to nutrition, such as housing, and socioeconomic structures affecting child care. Case studies provide insights into rural and urban family life. Chapter 12 presents results of a survey of interior Amerindian villages and the final chapter identifies the major factors affecting nutrition in Guyana. (FM)

- 5554 Pandhi, R.K., Bedi, T.R., Kanwar, A.J., Bhutani, L.K.** *Cutaneous tuberculosis; a clinical and investigative study.* Indian Journal of Dermatology (Calcutta, India), 22(2), Jan 1977, 99-106. Engl. 11 refs.

Clinical and laboratory data from 75 patients with cutaneous tuberculosis who attended the outpatient department of a tuberculosis clinic in New Delhi, India, are presented. Males were more commonly affected than females. Scrofuloderma and lupus vulgaris were the

most frequent types of cutaneous tuberculosis observed. Smears from the skin lesions were positive for acid fast bacilli in 6 cases of scrofuloderma and, of these 6 cases, mycobacterium tuberculosis could be cultured in 2 cases. Guinea pig and/or mice inoculation performed in 10 cases produced negative results. Treatment and follow-up of 25 cases are described. (Modified journal abstract.)

- 5555 Partono, F., Oemijati Hudojo, Joesoef, A., Clarke, M.D.** *Brugia malayi* in seven villages in south Kalimantan, Indonesia. Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 8(3), Sep 1977, 400-407. Engl. 8 refs.

In a 1971 study of *Brugia malayi* in the populations of seven Indonesian villages, 25% of the 1 764 night blood films collected were found to be positive for microfilaria; clinical lesions were present in 20%. Infection was more common in males and tended to increase with age. The vectors appeared to be *Mansonia uniformis*, *M. annulifera*, and *Anopheles barbirostris*. Microfilaria were also found in 13 of 51 cats examined, indicating that cats may be a reservoir of infection. Statistical data are included. (DP-E)

- 5556 Platero Bastos, R.** *Desnutrición: un estudio clínico evolutivo acerca de su prevención y tratamiento en el lactante menor. (Malnutrition: a clinical study of prevention and treatment in infants).* Semana Médica (Madrid), 148(11), 1976, 335-340. Span.

In Argentina, treatment of 50 malnourished infants (8 in the 1st trimester, 20 in the 2nd trimester, and 22 in the 3rd semester) was monitored over a 3-month period in order to ascertain the quantity of protein and calories required by age and degree of malnutrition, the anthropometric increment by age and degree of malnutrition, and the socioeconomic background of the infants. It was found that the amount of protein and calories accepted by the infants was approximately the same for all three ages and degrees of malnutrition, that treatment was most effective when started early, and that the infants' socioeconomic backgrounds were generally poor. Analysis of study findings plus a description of the therapeutic diet are included. (HC-L)

- 5557 Ponnampalam, J.T.** *Comparative study of malaria prophylaxis in peninsular Malaysia using chloroquine and a combination of sulphadoxine and pyrimethamine.* Journal of Tropical Medicine and Hygiene (London), 81(10), Oct 1978, 198-203. Engl.

A study was undertaken on a rubber plantation in Malaysia to demonstrate the effectiveness of a combination of 500 mg sulphadoxine and 25 mg pyrimethamine (one tablet Fansidar) in the treatment and control of malaria. Over a 1-year period, 327 participants were divided into three groups and administered, respectively, one tablet of Fansidar every two weeks; chloroquine, in a dose of 10 mg/kg body weight, once weekly; and a placebo, once weekly. Fansidar was found to be more effective and to have fewer side effects than chloroquine. A detailed

analysis of the study results and statistical data are presented. (HC-L)

- 5558 Priimagi, L., Reinet, J.** *Vaccination by the aerosol method.* Zeitschrift für Erkrankungen der Atmungsorgane (Leipzig, Germany), 150(3), 1978, 239-242. Engl.

After a review of the method of introducing vaccines by the inhalation of aerosols, the authors describe group vaccination with the aid of an electroaerosol generator. Up to 8 persons may be vaccinated simultaneously in a very short time. The viability of the microorganisms in the aerosol is preserved. Interferon inhalation seems to reduce symptoms of intoxication in the 1st days after onset of influenza or acute airway infection. The efficiency of vaccination against bacterial infections through aerosol inhalations demands further research. (Modified journal abstract.)

- 5559 Prost, A., Prod'hon, J.** *Diagnostic parasitologique de l'onchocercose; revue critique des méthodes en usage. (Parasitological diagnosis of onchocerciasis; a critical review of present methods).* Médecine Tropicale (Marseilles, France), 38(5), Sep-Oct 1978, 519-532. Fren. 86 refs.

Different methods for diagnosing onchocerciasis are compared under field conditions in the Sudan-savanna. Skin snips taken from both iliac crests with a sclerocorneal punch give the best results. The incubation of biopsies in normal saline solution is the most sensitive technique and the results may be further improved by filtration on millipore filter-paper and collagenase digestion. However, counting the microfilaria that emerged after 30 minutes in distilled water is the easiest method and is reasonably reliable for the comparison of results in space and time. The lack of sensitivity can be compensated for by incubation of the negative specimen during 24 hours in saline solution. Statistical data are included. (Modified journal abstract.)

- 5560 Purohit, M., Purohit, N.N., Saxena, S., Mehta, J.B.** *Effect of various factors influencing physical growth of Indian infants from birth to six months; a longitudinal study.* Indian Journal of Pediatrics (Calcutta, India), 44(358), Nov 1977, 327-340. Engl. Refs.

See also entry 5561.

This study of Indian infants from birth to age 6 months examines the relationship between growth patterns and the following factors: birth weight, height of parents, type of feeding, morbidity, socioeconomic groups, and the education of their mothers. Although the 1st four factors did not seem to have any effect on quarterly weight increments, maternal education appeared to have a beneficial effect and anthropometric measurements of children in the upper socioeconomic groups showed an increased growth rate in most areas. Copious statistical data are included. (DP-E)

- 5561 Purohit, M., Purohit, N.N., Saxena, S., Mehta, J.B.** *Physical growth of Indian infants from birth to six months; a longitudinal study.* Indian Jour-

nal of Pediatrics (Calcutta, India), 44(357), Oct 1977, 289-300. Engl.

See also entry 5560.

Measurements of physical growth of 125 normal infants aged up to 6 months were compared to those taken in other Indian studies. Boys surpassed girls in body weight, recumbent length, crown-to-rump length, and chest and head circumference. Birthweights doubled during the 4th month of age in both sexes. The infants were smaller than those studied elsewhere in India and grew more slowly than children in developed countries. Statistical data are included. (Modified journal abstract.)

- 5562 Quilici, M., Tasei, J.P., Dulat, C., Traore, M., Tounkara, A.** *Prévalence des tréponématoses parmi les populations nomades sédentarisées des villages de Djebok et Tin Aoukert, Région de Gao, République du Mali. (Prevalence of treponematoses among the nomadic people living in the villages of Djebok and Tin Aoukert, Gao Region, Republic of Mali).* Médecine d'Afrique Noire (Paris), 25(5), May 1978, 299-303. Fren. 13 refs.

The authors examined 350 traditional nomads who had become sedentary inhabitants of two villages. The life style provided favourable conditions for the spread of venereal syphilis among adults and endemic syphilis (*bejel*) among children. Positive serological tests for treponematoses were found in 42%. The majority of cases in children aged 5-10 years and adolescents aged 11-15 years are attributable to *bejel*. For those aged 31-40 years there was a greater proportion of positive tests among females than males, suggesting that adult females may have acquired *bejel* from infected children. Inadequate penicillin therapy may have been responsible for the high incidence of positive tests in other adults. Statistical data are included. (Modified journal abstract.)

- 5563 Rampal, L.** *Nutritional status of primary school children: a comparative rural and urban study 1976.* Medical Journal of Malaysia (Singapore), 32(1), Sep 1977, 6-16. Engl. 8 refs.

The weights and heights of 3 107 rural schoolchildren and 2 253 urban pupils, aged 7-12 years and belonging to the three major Malaysian ethnic groups (Malay, Chinese, and Indian), were measured and compared. The Chinese children were taller and heavier than the Malay and Indian groups in both rural and urban areas. The rural Indian children had the least satisfactory growth achievement. Poor nutrition and low family income were held responsible for increased malnutrition among rural children, although the differences among the ethnic groups are attributed to socioeconomic rather than genetic differences. Statistical data are included. (Modified journal abstract.)

- 5564 Reddaiah, V.P., Nath, L.M.** *Birth and death registration in rural area of Comprehensive Rural Health Services Project, Ballabgarh.* Indian Journal of Medical Research (New Delhi), 67, Jun 1978, 1033-1037. Engl.

A 1975 study was conducted in the Dayalpur, India,

primary health centre catchment area (population 35 000) to assess the extent of under-registration in the traditional system of birth and death registration and to compare the causes of death recorded by both the traditional and modern systems. The study revealed an under-registration of 22.4% for births and 37.04% for deaths in the traditional system, where more than 61% of deaths were attributed to fever. The modern system accurately recorded causes of death and the authors recommend that it be extended to all areas of the country. Statistical data are included. (DP-E)

- 5565 Reinhardt, M.C., Gautier, R., Reinhardt, N.M.** *Study of 204 consecutive deliveries in Abidjan-anthropometric data of newborns, mothers and placentas.* Helvetica Paediatrica Acta (Basel, Switzerland), 33(41), 1978, Suppl., 21-42. Engl. 26 refs.

Anthropometric measurements of newborn infants, mothers, and placentas were taken in 204 consecutive deliveries at Adjame Maternity Hospital in Abidjan, Ivory Coast. A clinical assessment of gestational age was made. Low mean birth weight can be attributed to a higher incidence of preterm newborn infants. Incidence of small-for-age and large-for-gestational-age is similar to that in developed countries. Detailed analysis of correlations between maternal, placental, and neonatal variables show that birth weight is dependent on the nutritional status of the mother and on the size of the placenta. The main group at risk for impaired fetal growth, prematurity, and low birth weight are children born to primiparous mothers. Statistical data are included. (Modified journal abstract.)

- 5566 Rivera Castañeda, C., San Martín Narro, F., Ramos Aliaga, O.** *Nivel de salud del niño en Trujillo, Perú; encuesta de morbilidad en niños menores de cinco años. (State of child health in Trujillo, Peru; survey of morbidity in children aged less than five years).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 84(2), Feb 1978, 157-171. Span. 15 refs.

In order to measure child health status in Trujillo, Peru, a representative sample consisting of 2% of all children aged less than 5 years (414 individuals) was studied over a 1-year period. The families of the children were interviewed to determine their socioeconomic status and living conditions; mothers were questioned every month regarding their children's illnesses and their management; and at the beginning and halfway through the study the children were given a thorough medical examination. This paper presents, analyzes, and discusses the findings of the study. (HC-L)

- 5567 Rivera, E.F., Quinto, H.** *Evaluation of a new infant formula on Filipino babies.* Journal of the Philippine Medical Association (Manila), 53(7-8), 1977, 219-234. Engl.

A 12-week study involving 43 newborn Filipino infants, 26 of whom received an experimental milk formula while the control group consumed a commonly available commercial formula, showed that the 1st group experienced

comparable weight, height, and head circumference increases. The food under study was a humanized milk formula with adjusted protein, carbohydrate, fatty acid, and minerals that contained supplements of vitamins and iron. It was well accepted and in no case was it necessary to discontinue its use. Statistical data are included. (DP-E)

- 5568** Rodger, F.C. ed(s). *Onchocerciasis in Zaire; a new approach to the problem of river blindness*. Oxford, UK, Pergamon Press, 1977. 195p. Engl., Fren. Refs.

During a 6-week Zaire River expedition in 1974, a study team collected observations of all aspects connected with onchocerciasis in the area: socioeconomic factors, nutrition, parasitology, immunology, ophthalmology, and entomology. The results of these observations are analyzed and set forth in this book, which contains copious statistical data. Appendices present information on reconnaissance of the Upper Zaire, support for the study team, the survey across the Congo Basin, and insects collected other than *Simuliidae*. There are summaries in English and French at the end of each chapter, many photographs and drawings, and an index. (RMB)

- 5569** Rolland, A., Thylefors, B., Pairault, C. *Evolution sur neuf ans de l'onchocercose oculaire dans une communauté villageoise d'Afrique occidentale. (Evolution of ocular onchocerciasis over nine years in a village in West Africa)*. Bulletin of the World Health Organization (Geneva), 56(5), 1978, 805-810. Fren. 8 refs.

Also published in English and Spanish.

The results are reported of two ocular examinations carried out 9 years apart on 80 inhabitants of a village in Upper Volta where onchocerciasis is hyperendemic. Lesions had become worse in 73% of the subjects aged more than 10 years and visual acuity was reduced in 40% of this group. The presence of microfilaria in the anterior chamber of the eye, detected without any special manoeuvre, was an indication of poor prognosis; after 8 years most of these subjects had developed severe lesions. Of 16 subjects who were blind at the 1st examination, 12 were known to have died before the 2nd examination. Statistical data are included. (Modified journal abstract.)

- 5570** Saing, B., Sembiring, L., Napitupulu, L., Raid, N., Siregar, H. *Anthropometry in the newborn*. Paediatrica Indonesiana (Jakarta), 17, Sep-Oct 1977, 299-304. Engl.

Second Asian Congress of Pediatrics, Jakarta, Indonesia, 3-6 Aug 1976.

Anthropometric measurements of 219 Indonesian neonates were taken in two Medan hospitals from January-March 1976. Infants from higher socioeconomic levels had significantly higher measurements than those from lower levels (88%-99% of the Jelliffe standard), an indication of better maternal nutrition. Birth length, however, is not considered a reliable index for neonatal growth evaluation. Statistical data are included. (DP-E)

- 5571** Sangare, D., Allerdist, H., Ehrengut, W., Sarateanu, D.E. *Influenza in Mali 1978*. Lancet (London), 11(8084), 5 Aug 1978, 324. Engl.

Sera collected in Mali from May-June 1978 from children aged up to 3 years were examined for antibodies to influenza viruses. There was a low incidence of antibodies to B/Hong Kong/8/73 virus, but most of the children had antibodies to A/Victoria/3/75 (H3N2) and A/Texas/1/77 (H3N2). Of 114 sera collected in May, 88% had antibodies to A/Victoria and 93% to A/Texas. Statistical data are included. (Modified journal abstract.)

- 5572** Satyanarayana, T., Rao, D.P., Singh, B.S. *Antibacterial activity of six medicinal plant extracts*. Indian Drugs (Bombay, India), 14(11), Aug 1977, 209-210. Engl.

Leaf extracts from six medicinal plants (*Argemone mexicana* Horneum, Hort. Hofn., *Lagerstroemia parviflora* Roxb, *Latana camara* Linn., *Lochnera rosea* Richl, *Mimusops elengi* Sieber, and *Mangifera indica* Blume. Bijde) were prepared and evaluated for antibacterial properties. The 1st three and *M. elengi* were found to be most effective against *Bacillus anthracis*, *B. mycoides*, *B. pumilus*, *B. subtilis*, *Pseudomonas magiferae-indicae*, *Salmonella paratyphi*, *Staphylococcus albus*, *Vibrio cholerae*, *Xanthomonas compes-tris*, and *X. malvacearum* and are recommended for future study. (DP-E)

- 5573** Schoub, B.D., Greeff, A.S., Lecatsas, G., Prozesky, O.W., Hay, I.T. *Microbiological investigation of acute summer gastroenteritis in black South African infants*. Journal of Hygiene (London), 78(3), 1977, 377-385. Engl. Refs.

This paper presents and discusses the bacteriological and virological findings of an investigation of gastroenteritis in 37 South African black children aged 17 days-24 months who were admitted to hospital for severe dehydration during the summer of 1975-1976. It was noted that only one child in the sample was solely breast-fed as compared to 16% of control non-diarrhoeic infants and that over half of the sample were malnourished. (HC-L)

- 5574** Sermeno Lima, J.A. *Algunas consideraciones sobre la salud de la población salvadoreña. (Some remarks on the health of the population in El Salvador)*. Revista Centroamericana de Ciencias de la Salud (San José), 2(4), May-Jun 1976, 141-155. Span.

An analysis of statistical data from El Salvador demonstrates that neither vast increases in health resources nor drastic reduction in population growth would result in significant improvement in the health of the population but that reductions in infant and under-fives mortality of 40% and 60%, respectively, would result in an increase in life expectancy at birth of 5 years. Overall socioeconomic development is considered a crucial prerequisite to any improvement in the health of the population. (HC-L)

- 5575 Shah, D.N., Niyogi, A.K., Trivedi, D.H.** *Epidemiological study of foetal loss in Padra town.* Indian Journal of Preventive and Social Medicine (Varanasi, India), 8(1), Jun 1977, 75-82. Engl. Refs.

An epidemiological study to determine the causes of fetal loss, including abortion and stillbirths, was carried out in Padra, India, from 1 Jun 1971-31 May 1972. A total of 305 cases were followed through weekly visits until the termination of pregnancy. Risk of fetal loss was highest at the 3rd and 4th months of gestation, followed by a gradual decline until the 8th month, when a slight rise occurred. The incidence of abortion was 53.75% and the stillbirth rate was 5.5%. Tables present the effects of maternal age, parity, previous pregnancy outcome, occupation, education, height, haemoglobin level, spacings, and seasonal variation and their influence on fetal loss is discussed. (FM)

- 5576 Sharma, V., Sharma, R., Purohit, B.K.** *Study of feeding and weaning pattern of Sindhi children below 5 years in an urban area.* Indian Journal of Pediatrics (Calcutta, India), 44(532), May 1977, 115-120. Engl.

A random selection of 350 Sindhi children aged less than 5 years, mainly from lower socioeconomic classes, was used in a study of feeding patterns in Jaipur, India. Statistical data indicate the age and sex distribution of the children and the relationship of socioeconomic status to supplementary feeding and weaning age. In 60.3% of the cases, supplementary feeding was started at 6 months, although the majority of the children were breast-fed until the age of 18 months. The most popular supplementary foods were tea and milk. The major causes of discontinuing breast-feeding were inadequate milk supply or another pregnancy. (FM)

- 5577 Sinnathuray, T.A., Yusof, K., Ng, K.F., Palan, V.T., Pathmanathan, I.** *Federation of Family Planning Associations, Kuala Lumpur. International Development Research Centre, Ottawa. Report on maternal health and early pregnancy wastage in peninsular Malaysia.* Kuala Lumpur, Federation of Family Planning Associations, 1977. 166p. Engl.

Chapter 1 of this study of maternal health and pregnancy wastage in Malaysia examines its objectives and origins and chapter 2 describes the methodology. A sociodemographic profile of peninsular Malaysia is presented in chapter 3. Chapter 4 examines various factors affecting early pregnancy wastage in the area, including induced and spontaneous abortion, cultural and religious practices, education, contraception, age at marriage, maternal age, pregnancy intervals, etc. Statistical data are included. (DP-E)

- 5578 Sparke, B., Lowry, M.F.** *Neonatal death at the University Hospital of the West Indies.* West Indian Medical Journal (Kingston, Jamaica), 27(3), Sep 1978, 130-136. Engl. 10 refs.

The causes of neonatal death at the University Hospital of the West Indies (Kingston, Jamaica) were analyzed

from 1974-1977 in order to establish priorities for planning cost-effective newborn care. Major causes of death were intrapartum hypoxia, hypoxia, respiratory distress syndrome, infection, and congenital malformation; prematurity and low birth weight were contributing factors. The neonatal mortality was 16.87:1 000 live births, of which 8.89 (52%) were low-birth-weight babies. It was seen that death rates had remained virtually unchanged during the study period due to limitations in nursing staff, equipment maintenance, and supplies. Statistical data are included. (DP-E)

- 5579 Srivastava, R.N., Verma, B.L.** *Epidemiological study of blindness in an Indian rural community.* Journal of Epidemiology (Oxford, UK), 7(1), Mar 1978, 131-135. Engl.

In 1976, a house-to-house survey of blindness in an Indian rural community covering a population of 20 134 in 12 villages revealed a prevalence rate of 35 blind and 144 partially blind:10 000 population. Blindness was significantly associated with age, sex, marital status, occupation, and socioeconomic status of the respondents. Cataract, glaucoma, smallpox, and trachoma were the main causes of blindness. Preventive measures and improved medical facilities such as eye clinics are needed to reduce the toll of blindness in such a community. Statistical data are included. (Modified journal abstract.)

- 5580 Sulianti Saroso, J., Bahrawi, W., Witjaksono, H., Budiarto, R.L., Brotowasisto** *Controlled field trial of plain and aluminium hydroxide-adsorbed cholera vaccines in Surabaya, Indonesia, during 1973-75.* Bulletin of the World Health Organization (Geneva), 56(4), 1978, 619-627. Engl. 14 refs. Also published in French and Spanish; see also entry 5519.

A controlled field trial comparing the effectiveness of a plain cholera vaccine with that of a vaccine adsorbed to aluminum hydroxide was carried out in a cholera-endemic area of Indonesia from 1973-1975. In subjects aged 1-4 years, the adsorbed vaccine provided about 88% protection for 6 months following vaccination, compared to 53% for the plain vaccine, and still provided 50% protection for 11-14 months after the vaccination, while the plain vaccine provided no appreciable protection beyond 6 months. In those aged 5 years and over, both vaccines provided 50%-60% protection for 14 months. No side effects were noted. Statistical data are included. (Modified journal abstract.)

- 5581 Sureau, P., Fabre, J., Bedaya N'Garo, S., Come Butor, S., Poulougou, M.M.** *Vaccination simultanée de nourrissons en milieu tropical contre le tétanos et la poliomyélite. (Simultaneous tetanus and poliomyelitis vaccination of infants in the tropics).* Bulletin of the World Health Organization (Geneva), 55(6), 1978, 739-746. Fren. Also published in English and Spanish.

A group of 500 Central African infants were vaccinated simultaneously against tetanus and poliomyelitis by reduced doses of purified tetanus toxoid and trivalent inac-

tivated poliomyelitis vaccine, both adsorbed on calcium phosphate. The use of the new vaccines reduces the number of injections needed to provide adequate immunity: for tetanus, a single injection at the age of 5 months; for poliomyelitis, two injections 2 months apart at ages 5 and 6 months. Booster injections of both vaccines should be given 1 year later, at the age of 17 months. This reduction in the number of injections offers practical advantages for mass vaccination campaigns in the tropics. Statistical data are included. (Modified journal abstract.)

- 5582 Tada, I., Aoki, Y., Rimola, C.E., Ikeda, T., Matsuo, K.** *Onchocerciasis in San Vicente Pacaya, Guatemala.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(1), Jan 1979, 67-71. Engl. 11 refs.

An epidemiological survey for onchocerciasis was carried out in the San Vicente Pacaya area of Guatemala. A total of 2 153 inhabitants were examined by a single skin snip and 664 (30.8%) were positive for microfilaria. Of 1 217 persons examined simultaneously by skin snip and by palpation for nodules, 587 were positive by one or both methods; 101 infections were detected by onchocercal nodules only and these were usually in children or persons living in areas of low endemicity. It was concluded that both the skin snips and a search for nodules are required for accurately determining the presence of onchocerciasis in Guatemala. Statistical data are included. (Modified journal abstract.)

- 5583 Tarigan, S., Sembiring, L., Simatupang, J., Napitupulu, L.** *Health status of preschool children in some settlements of tobacco plantation labourers in North Sumatra.* Paediatrica Indonesiana (Jakarta), 17, Nov-Dec 1977, 371-377. Engl.

Second Asian Congress of Pediatrics, Jakarta, Indonesia, 3-6 Aug 1976.

A survey of 109 Indonesian children aged 1-5 years whose parents were workers on a tobacco plantation indicated that: 33% were undernourished; 50% had diarrhea, fever, skin infections, and cough; 70% were infected with ascariasis; and 4.5% suffered from vitamin A deficiency. Their diet, which consisted of rice, dry fish, a few vegetables, and very little fat, was inadequate for 67% of the children. Statistical data are included. (DP-E)

- 5584 Taylor, C.A., Emanuel, I., Morris, L.N., Prosterman, R.L.** *Child nutrition and mortality in the rural Philippines: is socioeconomic status important?* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 24(2), Apr 1978, 80-86. Engl. 36 refs.

The hypothesis that family socioeconomic status has a significant effect on child growth and mortality was investigated through anthropometric measurement of 587 Philippine children aged 0-59 months and interviews with their parents to determine family size, fetal and early childhood mortality, occupation, income, and other relevant indicators of family socioeconomic status. No

associations between mortality or growth and socioeconomic status were found. Several explanations for these unexpected results are suggested. Statistical data are included. (Modified journal abstract.)

- 5585 Tiendrebeogo, H., Roudaut, M., Schmidt, D., Delormas, P.** *Primo-infection tuberculeuse en Afrique tropicale; considérations thérapeutiques à propos de 140 primo-infections patentes.* (Treatment of patent tuberculous primary infection in tropical Africa; comments about 140 cases). Médecine Tropicale (Marseille, France), 37(3), May-Jun 1977, 273-278. Fren. 19 refs.

The authors analyze the results of treatment of 140 cases of primary tuberculous infection in Abidjan, Ivory Coast. More than 50% of the patients fell out of control before the 12th month of the 2-year study. Very often, specific and corticoid treatment is delayed because of poor diagnosis. As a result, retrocession is often slow or partial and ventilation problems occur. This is probably the most important cause of bronchiolectasis in African children. (Modified journal abstract)

- 5586 Tilve, S.** *Comparison of questionnaire and weightment methods in diet surveys.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(1), Jan 1978, 5-8. Engl.

A dietary survey carried out for 7 days in Maharashtra, India, compared the effectiveness of the questionnaire and the weightment methods of measuring nutrient intake. A total of 49 students aged 13-16 years were randomly selected and both methods were tested on all students. Although the questionnaire was less time-consuming and easier to use in the field, it overestimates individual calorie intakes by about 25%. Consequently, weighing the food items consumed gives a more accurate indication of intake. It was also found that determining moisture content was sufficient to estimate the nutrient value of cooked food samples. (FM)

- 5587 Tomkins, A.M., Drasar, B.S., Bradley, A.K., Williamson, W.A.** *Water supply and nutritional status in rural northern Nigeria.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 72(3), 1978, 239-243. Engl. Refs.

Incidence of protein-energy malnutrition was high in a community survey of preschool children in rural Nigeria among whom gastroenteritis was common. Wasting, with weight:height ratio less than 80%, was more common (37.9%) among those with scanty, unprotected water supplies than in those with copious protected water (19.2%), whereas stunting, with height:age ratio less than 90%, was similar. Statistical data are included. (Modified journal abstract.)

- 5588 Trowbridge, F.L., Newton, L.H.** *Seasonal changes in malnutrition and diarrheal disease among preschool children in El Salvador.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 28(1), Jan 1979, 136-141. Engl. 11 refs.

The nutritional status of preschool children in a rural

population in El Salvador was assessed quarterly for 1 year using height, weight, and arm circumference measurements in order to define seasonal changes in malnutrition. When compared with data collected by a local clinic on a national level, these results indicated that a similar personal increase in both measured malnutrition and the reported incidence of malnutrition and diarrheal disease occurred at the onset of the rainy season. Statistical data are included. (Modified journal abstract.)

- 5589 Umoh, I.B., Bassir, O.** *Lesser known sources of protein in some Nigerian peasant diets.* Food Chemistry (Barking, UK), 2(40), 1977, 315-321. Engl. Refs.

In order to assess the protein value of certain traditional Nigerian foods, the proximate chemical, mineral, and amino acid composition of snails, periwinkles, smoked fish, crayfish, and hen's egg were analyzed and compared. The results of the analysis are discussed and presented as statistical data. It is concluded that, with their high content of lysine, these foods could effectively supplement the cereals and legumes that are widely consumed in Nigeria; they also provide necessary mineral elements. Further tests are being conducted. (DP-E)

- 5590 Underwood, B.A.** *Hypovitaminosis A and its control.* Bulletin of the World Health Organization (Geneva), 56(4), 1978, 525-541. Engl. Also published in French and Spanish.

Hypovitaminosis A is considered to be the most common cause of blindness in developing countries, but vitamin A deficiency is difficult to measure. The recommended procedure for identifying the at-risk population involves a three-part survey to evaluate dietary intake, biochemical indices, and clinical signs. This article examines these approaches in detail, but, in the present state of knowledge, none of them is considered satisfactory. A model for determining at-risk children and several types of preventive programmes appropriate to different situations are also discussed. (Modified journal abstract.)

- 5591 University of Ghana Medical School, Accra. University of California, School of Public Health, Los Angeles, Cal.** *Proceedings of the Seventh Annual Review Meeting; Danfa Comprehensive Rural Health and Family Planning Project, Ghana.* Accra, University of Ghana Medical School, 1976. 48p. Engl. Seventh Annual Review Meeting, Accra, Ghana, 12 Feb 1976.

These proceedings from the 1976 meeting to review the progress of the Danfa Comprehensive Rural Health and Family Planning Project (Ghana) contain a summary of activities for 1975, reports on maternal child health and family planning activities and health education, an outline of the health care system, a longitudinal survey, an evaluation, project proposals for the three areas covered, and considerations of future directions. There are a list of participants, opening and closing addresses, and the minutes of the meeting of the project advisory committee. (DP-E)

- 5592 Van Steenberg, W.M., Kusin, J.A., Onchere, S.R.** *Machakos Project studies: agents affecting health of mother and child in a rural area of Kenya; VIII: food resources and eating habits of the Akamba household.* Tropical and Geographical Medicine (Haarlem, Netherlands), 30(3), Sep 1978, 393-413. Engl. Refs.

See also entries 4970, 5497, 5536, and 5545.

In two ecologically dissimilar areas of Machakos, Kenya, investigations were carried out on the nutritional status of infants, preschool children, and mothers in two different seasons. This article discusses observations made on factors that influence the pattern of food and food availability, food consumption, and household economy. Higher socioeconomic groups of small farmers consumed staples of maize and beans only partly derived from their own production and spent more money on staples, milk, vegetables, fat, and sugar. Poorer households existed mostly on their own staple produce and had to spend a large part of their total income on other foods. Statistical data are included. (DP-E)

- 5593 Varavithya, W., Posayanond, P., Tontisirin, K., Chernjitra, L., Kashemsant, C.** *Oral hydration in infantile diarrhoea.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(3), Sep 1978, 414-419. Engl. 15 refs.

Of 22 infants admitted to Ubol Provincial Hospital (Thailand) with acute diarrhea, in the 1st 24 hours half were treated by nasogastric infusion with bedside preparation of electrolyte solution and the other half by intravenous infusion; the results of these treatments are compared. The absorption of nasogastric infusion fluid was remarkable in terms of amount of stool loss, weight gain, and reduction of serum specific gravity and urea nitrogen and this method has much to recommend it. However, all the infants recovered once their dehydration was corrected without complications. Statistical data are included. (DP-E)

- 5594 Viseshakul, D., Techakaisaya, D., Chularojmontri, V., Premwatana, P., Rajatasilpin, A.** *Growth rate, feeding practices, dietary intake of Thai infants under three years old and of two Bangkok slum areas.* Journal of the Medical Association of Thailand (Bangkok), 60(11), Nov 1977, 551-558. Engl.

The nutritional status of Thai slum children aged less than 3 years was assessed by a combination of anthropometric measurements and a 24-hour recall food consumption study. The findings reveal that the prevalence of protein calorie malnutrition was somewhat less than indicated by a 1970 study, although the energy intake of the children was still only 36% of the recommended amount. The authors suggest that infants be breast-fed until the age of 1 year, with an energy supplement of 50 Kcal/kg:d (50% fat) and a rice-based protein supplement of 0.5g/kg:d beginning at the age of 6 months. Statistical data are included. (Modified journal abstract.)

- 5595** Weekly Epidemiological Record, Geneva. *Malaria surveillance/Surveillance du paludisme*. Weekly Epidemiological Record (Geneva), 21 Jul 1978, 215-216. Engl., Fren.

In 1977, 184 cases of malaria were reported in Singapore (73.3% of the 1976 figure). Of these cases, 174 were imported; 108 occurred in local residents who contracted the disease abroad. *Plasmodium vivax* caused 75% of the infections; *P. falciparum*, 22.8%; *P. Malariae*, 0.5%; and mixed infections, 1.6%. There were three deaths from falciparum malaria and two of these infections seemed resistant to chloroquine. (DP-E)

- 5596** Weinstock, H., Paniagua, F., Garces, J.L., Zúñiga, A., Granados, C. *Bancroftian filariasis in Puerto Limón, Costa Rica*. American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(6), 1977, 1148-1152. Engl.

In Puerto Limón (Costa Rica), examination of 1 ml samples of night blood from 142 randomly selected and 1 196 associated persons by Knott and filter-chamber techniques revealed microfilaria of *Wuchereria bancrofti* in about 3% of the 2 338 samples. Of 64 infected cases, 11 had clinical findings suggestive of filariasis; 21 others had symptoms of elephantiasis. The frequency of infection was higher in males, blacks, and those aged 10-19 and more than 45 years. Statistical data are included. (Modified journal abstract.)

- 5597** Wenlock, R.W. *Prevalence of hookworm and of S. haematobium in rural Zambia*. Tropical and Geographical Medicine (Haarlem, Netherlands), 29, 1977, 415-421. Engl. Refs.

The prevalence of hookworm and of *Schistosoma haematobium* in a representative sample of the rural population of Zambia was assessed during a national nutrition survey. A total of 7 212 people of all ages and both sexes were examined for hookworm, of whom 4 920 (68%) provided a stool sample; of these, 48.6% were positive. Of 7 479 people examined for schistosomiasis, 5 887 (79%) provided urine samples, of which 16.6% were positive. The epidemiology of both diseases is discussed. Statistical data are included. (Modified journal abstract.)

- 5598** Willett, W.C., Kilama, W.L., Kihamia, C.M. *Ascaris and growth rates: a randomized trial of treatment*. American Journal of Public Health (New York), 69(10), Oct 1979, 987-991. Engl. 25 refs.

In a 1-year Tanzanian study, 341 preschool children received either levamisole or placebo treatment at 3-month intervals, when their heights and weights were measured. Among 273 children who completed the study, the rate of weight gain was 8% greater for those receiving levamisole than for the controls. In the 78 children known to have ascariasis at the beginning of the study, weight gain was 21% greater in the treated children than in the control group. The rate of height gain was the same for both groups. Statistical data are included. (Modified journal abstract.)

- 5599** Wray, J.D. *Direct nutrition intervention and the control of diarrheal diseases in preschool children*. American Journal of Clinical Nutrition (Bethesda, Md.), 31(11), Nov 1978, 2073-2082. Engl. 11 refs.

In 1962, a nutrition rehabilitation centre was established to provide inpatient care to malnourished children from Candelaria, Colombia. Later, the centre organized a nutrition intervention programme to provide nutritional supplements to at-risk children and nutrition education to their mothers; this teaching programme is described. Evaluation revealed significant improvement in the children's nutritional status and an unexpected decrease in the incidence of diarrhea, although no cause and effect relationship could be definitely established since there had also been concurrent improvements in household and environmental sanitation. Statistical data are included. (DP-E)

- 5600** Zeitlin, M., Masangkay, Z., Consolación, M., Nass, M. *Breast feeding and nutritional status in depressed urban areas of Greater Manila, Philippines*. Ecology of Food and Nutrition (London), 7(2), 1978, 103-113. Engl. Refs.

The results of this Philippine study revealed that marasmic infants tended to be weaned from the breast earlier than nutritionally normal infants in depressed areas. However, bottle-feeding was not a statistically significant cause of malnutrition in a sample of 513 infants aged 6-48 months. Marasmic children were affected by other significant variables, such as mother's education, birth order, morbidity, parental employment, and family stability. Because poor urban Filipino mothers, with an average 6th-grade education, do bottle-feed as adequately as they breast-feed, they could theoretically feed their infants well if instead of purchasing milk they breast-fed and used the savings to buy weaning foods. Statistical data are included. (Modified journal abstract.)

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