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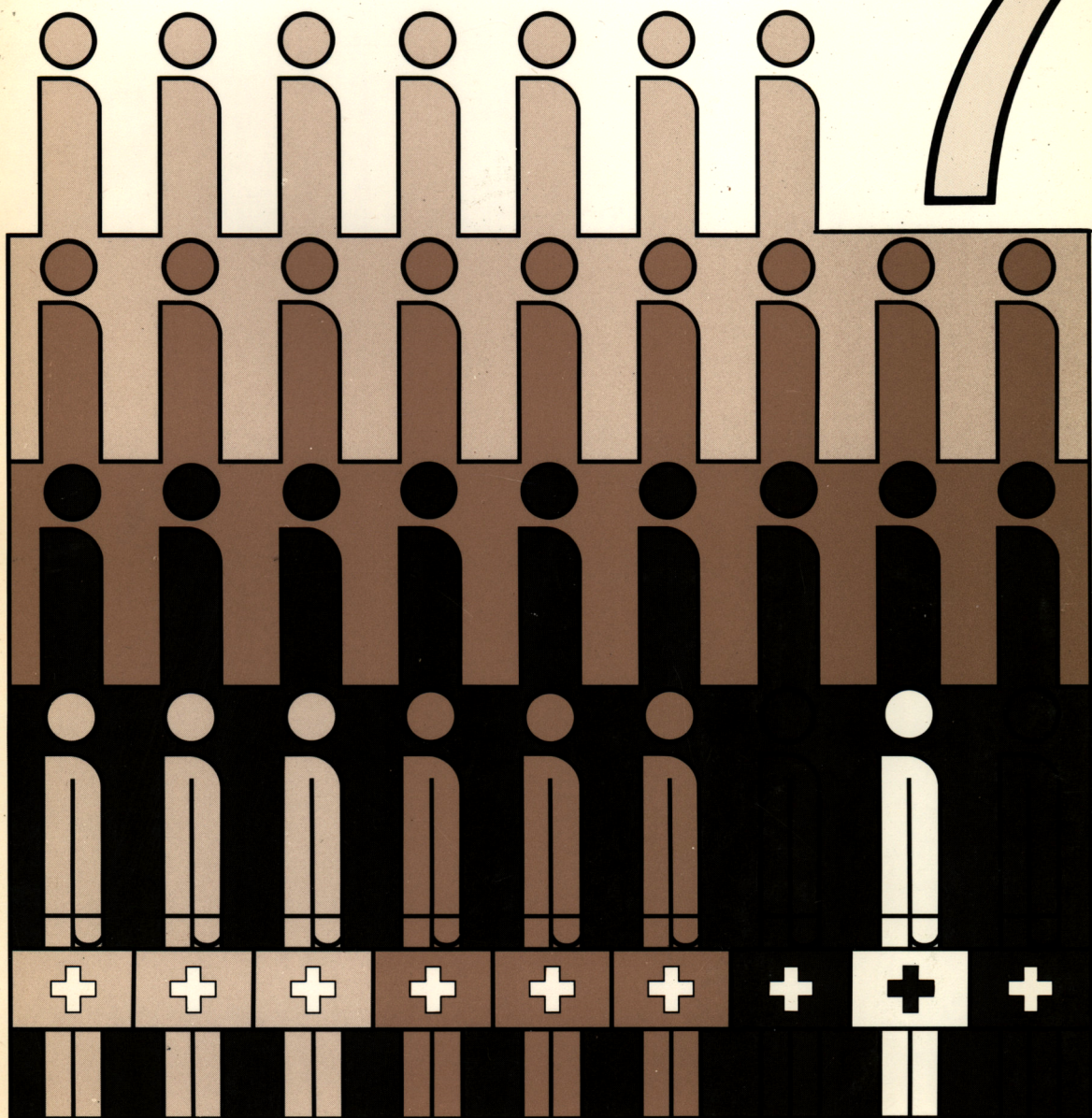
SALUS: LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

Editor: ROSANNA M. BECHTEL

VOLUME

7



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

**An annotated bibliography with special emphasis on developing
countries**

Volume 7

Editor: Rosanna M. Bechtel

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

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

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

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Foreword

In addition to the Information Sciences Division, which produces this bibliography, the International Development Research Centre contains other divisions concerned specifically with development projects in agricultural, food, and nutrition sciences, social sciences, and health sciences. During its first 10 years, IDRC's Health Sciences Division supported 168 projects with grants totaling \$25 million. Of these projects, 52 were carried out in Asia, 47 in Latin America, 43 in Africa and the Middle East, and 26 in other regions. At present, the Health Sciences Division's research support is concentrated in five main areas: rural health care, tropical diseases, water supply and sanitation, fertility regulation, and occupational health. Its overall goal, however, is to help developing countries provide a better standard of health for their people through whatever means are most appropriate.

We are pleased to be able to include in this volume of the SALUS bibliography series a preface by Dr John Gill, the Director of IDRC's Health Sciences Division. I would also like to thank Ms Rashim Ahluwalia of the Health Sciences Division and, as always, Mrs Anita Firth for her help in preparing this volume of the bibliography.

Rosanna M. Bechtel
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Information Sciences Division
International Development
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Preface

The primary health care conference at Alma Ata in September 1978 focused on improved provision of primary health care (PHC) to meet the increasing demands of the less privileged in the Third World, as opposed to the present emphasis on large curative complexes in cities to meet the needs of a few, with recurrent costs so high that little is left for expansion and improvement of rural health care. The development of health care systems is not an either/or proposition, as many proponents of PHC seem to suggest. Health care must be looked at from its totality, which includes primary, secondary, and tertiary care. If large efforts are to be made in the primary sector, adequate provision will also need to be made for adjustments in the secondary and tertiary systems; otherwise, chaos and disillusionment will follow, bringing attempts to provide better health care through PHC into disrepute.

The unhealthy atmosphere that has evolved among professionals regarding curative and preventive care must be contained; if not, this polarization is likely to lead to declining standards of care. Those responsible for curative and preventive care should work hand in hand if systems are to be developed to provide the technologies that exist and will be forthcoming. Everyone agrees that prevention is better than cure; however, the conditions that exist today in many parts of the developing world are such that the burden of disease is so high among the populations that unless some curative work can be accomplished, concerns for prevention are likely to fall on deaf ears.

The different types of personnel recruited from varying walks of life to improve the provision of health care have been widely studied. They include illiterates, persons with a primary education, and the more educated members of the community. Although the medical doctor alone is not capable of providing health care to everyone, it is naive to believe that by simply giving illiterate or minimally educated villagers some training, they can do a better job, as many advocates of this approach seem to believe.

What is lacking is a real attempt to build systems where highly and appropriately trained doctors and auxiliaries can complement each other and, by so doing, provide better levels of health care for all. If low-level personnel are used to provide health care, an active, supportive supervisory mechanism must be an integral element from the beginning to prevent them from deteriorating to the level of quacks, as has been observed in some countries.

Most decisions are made at the top. How do these decisions percolate down to the periphery for execution? Similarly, how are changes at the peripheral level transmitted back to the top so that decision-making and policymaking can be more relevant to the people's needs? The dearth of trained middle-level personnel both at the administrative and functional levels (e.g., administrative assistants, accountants, nurses, health inspectors) in most health services is frightening; no system can function efficiently under those conditions. To allocate new cadres of

health personnel and to authorize new capital expenditures for facilities and equipment without adequate middle management capable of handling the concomitant forms of administration and supervision, or adequate channels of supply and communication, is to doom the enterprise to failure.

J. Gill, M.D.
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Abbreviations and Acronyms

AD — Anno Domini	PAHO — Pan American Health Organization, Washington, D.C.
AFSC — American Friends Service Committee, Philadelphia, Pa.	PCM — protein calorie malnutrition
BCG — Bacillus Calmette-Guerin vaccine	PE — physician extender
DDT — dichlorodiphenyltrichloroethane	PHC — primary health care
Eng — English	Span — Spanish
FAO — Food and Agriculture Organization, Rome	UK — United Kingdom
Fren — French	UN — United Nations, New York
g — gram	UNCTAD — United Nations Conference on Trade and Development, Geneva
IBRD — International Bank for Reconstruction and Development, Washington, D.C.	UNDP — United Nations Development Pro- gramme, New York
IDRC — International Development Research Centre, Ottawa	UNICEF — United Nations Children's Fund, New York
Ital — Italian	UNIDO — United Nations Industrial Develop- ment Organization, Vienna
IUD — intrauterine device	USA — United States of America
kg — kilogram	USSR — Union of Soviet Socialist Republics
km — kilometre	WFP — World Food Program, Rome
m — metre	WHO — World Health Organization, Geneva
MCH — maternal child health	
NP — nurse practitioner	

I Reference Works

- 4201 American Public Health Association, Washington, D.C. *Salubritas*.** Washington, D.C., American Public Health Association. Engl.
Also published in French and Spanish.

This periodical published quarterly in English, French, and Spanish is intended to be an international health information exchange. It presents feature articles on health education, disease control, child health, health manpower training, family health, and nutrition projects. A readers' exchange section invites public comment and contributions. Notices of conferences and training courses are highlighted and appropriate literature is reviewed. Health-related institutions can solicit the help of interested readers for special programmes or projects by placing an advertisement in *Salubritas*. (DP-E)

- 4202 Bent, M. *Role of auxiliary health workers in the delivery of primary health care: a study/report*.** n.p., Sep 1978. 100p. Engl.

Training programmes for medical assistants in Guatemala, Papua New Guinea, Nepal, and India and for village health workers in Alaska (USA), Papua New Guinea, Indonesia, Guatemala, and India are examined in this report. Twelve specific auxiliary training programmes in Mexico, Guatemala, India, Samoa, Thailand, Bangladesh, and Nepal are described in detail. Information is given on the location of each programme, student selection, length of the course, projected job description curriculum, etc. Appendix 1 covers training programmes for medical students, nurses, and child health associates in Indonesia, Thailand, and the USA; appendix 2 contains country studies of all the above-mentioned nations. (RMB)

- 4203 Bourré, A.L. ed(s). South Pacific Commission, Noumea. *Annotated bibliography on medical research in the South Pacific; addendum no.5/Bibliographie commentée de la recherche médicale dans le Pacifique Sud; supplément no.5*.** Noumea, South Pacific Commission, Technical Paper No. 142, Part VI, 1978. 141p. Engl., Fren.
See also entries 2102, 2114 (volume 4), 2801, and 2802 (volume 5).

In response to requests for information on medical and public health subjects, the South Pacific Commission has published a 6th volume in its series of annotated bibliographies. Items are grouped under these general headings: physiology, personal hygiene, public health, treatment, disease, surgery, and gynaecology. Annexes contain a subject classification (based on the Dewey

Decimal system), a subject index in alphabetical order, an author index, and an alphabetical list of journals from which items have been taken. (HC-L)

- 4204 Hamburger, J., Mery, J.P., le Porrier, M. *Petite encyclopédie médicale: guide de pratique médicale*.** 15e édition. (*Small medical encyclopedia: practical medical guide*. 15 edition). Paris, Flammarion Médecine-Sciences, 1977. 1479p. Fren.

This medical encyclopedia is divided into 3 main sections. The 1st presents terminology connected with drugs, other pharmaceutical products, and treatment methods. Drug descriptions are accompanied by the recommended dosage and notes on their usage. The 2nd section deals with the area of the symptomatology of diseases. Each entry includes general information on the disease, basic diagnostic elements, appropriate laboratory tests, complications, and methods of treatment. The final section covers laboratory tests and various techniques of clinical investigation. Statistical data and charts are included. (FM)

- 4205 Hogarth, J., Aujaleu, E.J. *Vocabulaire de la santé publique*.** (*Public health vocabulary*). Copenhagen, WHO, Santé Publique en Europe 4, 1977. 271p. Fren. Refs.
Also published in English as *Glossary of Health Care Terminology*.

The French version of the WHO glossary of health care terminology represents the English edition as accurately as possible without being an exact translation. Some 350 terms are presented in alphabetical order giving the definition as adopted by WHO and including bibliographic information for each term. The English equivalent is also given. For the most part, clinical and specialized vocabulary is avoided and public health terms covering personnel, training, hospital care, mortality, maternal child health, administration, and planning are emphasized. (FM)

- 4206 Ohio State University, Columbus, Ohio. National Library of Medicine, Washington, D.C. *Recurring bibliography: education in the allied health professions*.** Columbus, Ohio, Ohio State University, 30 Jun 1978. 28p. Engl.

This 10th recurring bibliography includes those articles listed in *Index Medicus* from April 1977-March 1978. Only articles that focus on the education of auxiliary health workers and can be retrieved by the Medical Literature Analysis and Retrieval System are cited.

Since this bibliography has been developed specifically for the allied health field, the reader is referred to these related recurring bibliographies developed by the National Library of Medicine *Bibliography on Medical Education*, *Index to Dental Literature*, *International Nursing Index*, *Anesthesiology Bibliography*, and the *Bibliography of Epidemiology*. (DP-E)

- 4207 Rosal, R.R., Manere, N.A.** *Filariasis in the Philippines: a selected annotated bibliography*. Manila, University of the Philippines, Institute of Public Health, Jun 1974. 55p. Engl. Unpublished document.

This bibliography was prepared at the library of the Public Health Institute of the University of the Philippines. It contains 102 annotated references on English-language material pertaining to the epidemiology and control of filariasis in the Philippines, with an additional 15 entries without annotations. Each entry contains author, title, source, paging, date of publication, and location information. Arranged in alphabetical order, the material included falls into one of three categories: articles and books written by Filipinos whether published at home or abroad, material concerned with Philippine subjects wherever published and whoever wrote them, and items published in the Philippines regardless of author. Lists of abbreviations, publications consulted, and location codes are included. (FM)

- 4208 Trzyna, T.C. ed(s).** *World food crisis: an international directory of organizations and information resources*. Claremont, Cal., Public Affairs Clearinghouse, 1977. 140p. Engl.

This directory provides notes on organizations concerned with world food and nutrition. Emphasis is on international bodies and those based in North America, but some organizations in other countries are listed. The information was collected by questionnaire from the organizations and from secondary sources. The organizations range widely from UN agencies to the Shaker-town Pledge Group (which advocates a simple lifestyle) and the Israeli Ministry of Foreign Affairs. (Modified journal abstract.)

- 4209 WHO, Geneva.** *World health*. Geneva, WHO. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish. Published monthly by WHO in Arabic, English, French, German, Italian, Persian, Portuguese, Russian, and Spanish, this journal covers general issues of health care

with special emphasis on developing countries. Feature articles by health care administrators, officials of WHO, health workers, etc., are accompanied in some issues by a children's page and summaries of recent developments in medicine. Special issues focus on specific topics such as health services in Latin America, the integration of traditional and modern medicine, etc. (FM)

- 4210 WHO, Geneva.** *Technologie appropriée pour la santé: bulletin d'information*. (Appropriate health technology; information bulletin). Geneva, WHO. Fren.

Also published in English and Spanish.

This irregular publication deals with appropriate health techniques and equipment that can contribute to primary care and development. Examples include a portable X-ray machine, water supply and treatment, diagnostic and screening aids, sterilization measures for tropical countries, a swimming pool heating system, a means of recovering silver from used X-ray film, etc. One recent issue has a bibliography of reference materials. Readers' contributions are solicited. (RMB)

- 4211 WHO, Geneva.** *Appropriate technology for health directory*. Geneva, WHO, Appropriate Technology for Health Programme, Apr 1978. 45p. Engl.

WHO's Appropriate Technology for Health Programme has compiled a directory of organizations, institutions, groups, and individuals involved in appropriate health technology. Those who responded to a questionnaire distributed in November 1977 are listed alphabetically within the geographical divisions of WHO's regional offices (Africa, the Americas, the Eastern Mediterranean, Europe, Southeast Asia, and the Western Pacific). There is also a list of subjects and a subject index ranging from agricultural equipment to water treatment. (DP-E)

- 4212 WHO, Geneva.** *Manual of the international statistical classification of diseases, injuries, and causes of death; 1975 revision (volume 1)*. Geneva, WHO, 1977. 733p. Engl.

This new edition of the manual has been revised according to the decisions of the International Conference for the Ninth Revision of the International Classification of Diseases. In addition to the main body of the classification, it contains a chapter on medical certification and rules for classification, tabulation lists for the presentation of statistics for various purposes, and a series of definitions and recommendations. An alphabetical index, which will form the 2nd volume, is in preparation. (Modified journal abstract.)

II Organization and Planning

II.1 Health Manpower

See also: 4268, 4272, 4333, 4371, 4588, 4592.

- 4213** Agbayani, B.F., Damian, A.C., Mendoza, C.R. ed(s). *Proceedings and selected writings on paraprofessional health workers manpower development*. Manila, University of the Philippines, Postgraduate School of Medicine, 1975. 199p. Engl. Workshop on Paraprofessional Health Workers Manpower Development, Manila, Philippines, 28-30 Aug 1974.

A multidisciplinary workshop was convened to examine the potential role of the paraprofessional health worker in rural areas of the Philippines. This document presents the 34 position papers, preceding papers, and articles that constitute the workshop proceedings. Topics covered by the paper include medical care in the Philippines, the need for auxiliary health workers, a proposal for strengthening the rural health services, various programmes and projects for training and deploying auxiliary health workers, the role of the professional within the rural health services, and the potential of training *hilots* (traditional birth attendants) as family planning motivators. (HC-L)

- 4214** Ahmed, S. *Potential contribution of primary school teachers to the health of a developing country*. Lancet (London), 2(8084), 5 Aug 1978, 307-308. Engl.

The author suggests that primary school teachers, especially teachers of health sciences, are a valuable and under-used resource for health education in Kenya. Because of Kenya's emphasis on primary education, primary schools in rural areas are evenly distributed, well-attended, and staffed by well-qualified teachers, whereas health centres are thinly scattered, inaccessible to many, and staffed largely by poorly educated auxiliaries who know less about public health than teachers. An example is taken from Kisumu district. With proper training, the author feels that teachers could become better health promoters than health auxiliaries because they are already known and respected in their communities. (RMB)

- 4215** Basalamah, A., Rosinski, E., Schumacher, H. *Developing the medical curriculum at King Abdulaziz University*. Journal of Medical Education (Chicago, Ill.), 54(2), Feb 1979, 96-100. Engl.

King Abdulaziz University, Jeddah, Saudi Arabia, is attempting to develop a medical curriculum responsive to the health needs of the people. In creating the curricu-

lum, planners studied health resources and needs, regional developments, demographic patterns, socioeconomic and cultural factors, general education development plans, vital statistics, and existing and projected health facilities. These and other factors helped determine the format and content of the curriculum, which is intended to produce individuals for leadership roles as medical educators, practitioners, and researchers. (Modified journal abstract.)

- 4216** Brown, E.R., Margo, G.E. *Health education: can the reformers be reformed?* International Journal of Health Services (Westport, Conn.), 8(1), 1978, 3-26. Engl. 81 refs.

Health educators have created a new professional role that emphasizes the changing of individuals rather than their social conditions. This article shows how historical roots, ideological perspectives, and structural constraints have combined to create an ambiguous, generally conservative role for the health education profession. Epidemiological evidence is presented that contradicts many implicit notions of disease etiology that underlie health education approaches. The authors suggest an ecological model of health education that takes account of the multiple causes of disease and is committed to progressive social change. (Modified journal abstract.)

- 4217** Cromwell, F.S. *Occupational therapy in Mexico*. American Journal of Occupational Therapy (Rockville, Md.), 31(8), Sep 1977, 512-515. Engl.

Over the past 25 years, occupational therapy in Mexico has developed from a service of limited care to the physically disabled by a handful of therapists into a broader general service to the dysfunctional on the part of some 75 certified graduates of three schools. In this paper, a consultant describes the attempts of occupational therapists to achieve professional development and recognition in the face of physician control, sex discrimination, government restriction, and the language barrier. (HC-L)

- 4218** de la Torre Montejó, E., Klaindorf Shainblatt, B., Casanova Arzola, R. *Educación continua en el Ministerio de Salud Pública de Cuba. (Continuing education in Cuba's public health ministry)*. Educación Médica y Salud (Washington, D.C.), 12(2), 1978, 119-134. Span. 8 refs.

Continuing education for all health personnel was institutionalized in Cuba with the creation of the *Viceministerio de Docencia e Investigación*, Ministerio de Salud Pública, in 1973; during the 1st trimester of 1977, the

Viceministerio carried out 804 different educational activities in which 12 228 professionals and technicians took part. This paper describes the organization, characteristics, and activities of the continuing education subsector, pointing out that one of the reasons for its success is the fact that suggestions for themes and priorities are accepted from all levels of the health system as well as from members of the professions themselves. (HC-L)

- 4219 Fendall, N.R.** *Barefoot doctors; health workers in the front line.* Round Table (London), No.264, Oct 1976, 361-369. Engl. 13 refs.

The history of primary health care services is examined, with emphasis on the present interest in auxiliary health workers and voluntary participation. The development of the barefoot doctor is traced and other examples of primary care programmes are discussed, including feldshers in Russia and, in the USA, medex, physician's assistants, and nurse practitioners. Programmes in developing countries are also presented: rural health technicians, rural health promoters, etc., in Guatemala; Venezuela's simplified medicine; training of traditional midwives in India and Thailand; Pakistan's health guards; and auxiliary training in Africa. (DP-E)

- 4220 Gardee, M.R.** *Aspect of community medicine; the medical care implication of manpower and other resources, with the rural black population as an example.* South African Medical Journal (Capetown), 52(9), 20 Aug 1977, 362-367. Engl. Fiftieth Congress of the Medical Association of South Africa, Johannesburg, South Africa, July 1975.

Foremost among the problems associated with the delivery of health care to South Africa's rural blacks is an acute shortage of health personnel that is aggravated by legislation restricting the training and practice of black physicians and the recognition of foreign medical degrees. These and other problems are discussed in this paper and some suggestions for their alleviation are put forward. These suggestions include relaxation of the above-mentioned laws, greater utilization of auxiliary health workers, and greater cooperation between government and university in the area of health manpower planning. (HC-L)

- 4221 Glazer, D.L.** *Educational and utilization evaluation of new health practitioners.* Fogarty International Centre Series on Teaching Preventive Medicine (Bethesda, Md.), 1, 1975, 73-81. Engl. Refs.

Before beginning or continuing a training programme for new health practitioners, health manpower planners must ask the same questions posed by potential employers: is there an employment market? Are there different roles for different practitioners? Are the skills being developed appropriate to these roles? Questions must also be asked about student selection and performance, curriculum, faculty, and programme costs. This article discusses the data needed to answer these and other questions and the implications of the answers obtained. (DP-E)

- 4222 Hernández Elías, R.** *Nuevo enfoque metodológico para la formación de los técnicos medios de la salud.* (New methodological approach for the training of middle-level health technicians). Revista Cubana de Administración de Salud (Havana), 4(1), Jan-Mar 1978, 31-46. Span. 12 refs.

The training of middle-level health technicians in Cuba since 1959 has been characterized by continuous consolidation, expansion, and modification as new developments in medical care technology or health care delivery have rendered some cadres obsolete and new specialties necessary. In order to increase the technicians' adaptability, plans for 1976-1980 are focusing on the development of curricula that are based on a judicious mixture of core and specialized subjects, the bulk of the core subjects being presented early in the course. The curriculum for laboratory technicians, which comprehends sub-specialties in clinical laboratory, gastroenterology, microbiology, and blood bank/transfusion, is presented as an example. (HC-L)

- 4223 Janssens, P.G.** *Intercountry coordination in the development of manpower.* Annales de la Société Belge de Médecine Tropicale (Brussels), 56(6), 1976, 405-418. Engl.

If the development of health manpower is to benefit from an intercountry coordination of the training of health workers at different levels and from a joint use of training facilities, it is essential to review the needs and resources in health manpower and training in the given context in order to identify and solve problems. This article examines: health manpower needs in terms of numbers and categories; training in terms of curricula, choice of training site, teachers, fellowships, training grants, and exchange of research workers' grants; training schools, institutes, and facilities; shortcomings and difficulties; and some practical options. (DP-E)

- 4224 Jato, M., Mounlom, D., Colgate, S., Carrière, J.** *Livres adaptés aux besoins des infirmiers africains.* (Books adapted to the needs of African nurses). Développement et Santé (Paris), (14), 1978, 7-10. Fren.

In 1976 and 1977, questionnaires were sent to students and graduates of nursing schools in Dakar and Yaounde to assess the need for textbooks specifically designed to fulfil the requirements of African nursing courses. Answers were tabulated and the areas most in need of books oriented to the African situation were arranged in descending order. Community nursing care, maternal child health, and basic nursing services were considered to be most lacking in relevant texts. Health education and adapting services to the available resources were other high priority areas in need of books. Further research into this question is required. (FM)

- 4225 King, M.E.** *Volunteers in health care in the United States.* Aspects: the International Journal of Volunteer Services (Washington, D.C.), Action Pamphlet No. 4200.19, 1(4), Dec 1977, 30-32. Engl.

Despite a physician:patient ratio of 1:700, increasing costs and specialization have made health care unavailable or undesirable to many US citizens, especially in rural areas. Nevertheless, many excellent volunteer programmes are filling this gap; of approximately 40 million volunteer workers in the USA, 15% serve directly in support and delivery of health services. Examples of successful volunteer programmes include a campaign by the US Department of Health, Education, and Welfare to immunize some 52 million children who have never been vaccinated and a Hawaii Department of Health project to assist Filipino, Samoan, and Korean immigrants. (DP-E)

- 4226 Medical World News, New York.** *Are more doctors the only answer to rural health care?* Medical World News (New York), 12(21), 28 May 1971, 29-35. Engl.

Several alternatives to the solo practitioner as the foundation of rural health care in the USA are described. In Alabama, a project based on the health team concept brings together 1 physician, 1 physician's assistant, 1 social caseworker, and clerical personnel for office work with 1 public health nurse and several aides responsible for home visits. A community health centre in Virginia serves 3 counties from 5 mobile units. Other approaches include a solo practitioner with electronic links to a medical school, a county health clinic, and a nurse practitioner. The main components of a successful rural health programme include some connection with a major medical centre, some form of team medicine, and in-home care. (Modified journal abstract.)

- 4227 Meyer, M.** *Girls in Israeli health services.* Aspects: the International Journal of Volunteer Services (Washington, D.C.), Action Pamphlet No. 4200.19, 1(4), Dec 1977, 27-30. Engl.

The Israel Volunteer Service was founded to organize the activities of young women graduates who are exempted from military service for religious reasons and choose instead to spend a year in some voluntary service activity. Of the 700 who will be serving in 1977-1978, almost 35% have volunteered to work in health services, often in one of Israel's 15 hospitals. Some examples of the contributions and experiences of previous volunteers are given. Each volunteer who completes her year of service is awarded a certificate that gives her special status when she applies for admission to professional training schools. (DP-E)

- 4228 Organización Panamericana de la Salud, Washington, D.C.** *Seminario sobre Utilización de Auxiliares y Líderes Comunitarios en Programas de Salud en el Area Rural; informe final. (Seminar on the Utilization of Auxiliaries and Community Leaders in Rural Health Programmes; final report).* Washington, D.C., Organización Panamericana de la Salud, Publicación Científica No. 296, 1975. 23p. Span. Refs.
Seminario sobre Utilización de Auxiliares y Líderes Comunitarios en Programas de Salud en el

Area Rural, Maracay, Venezuela, 18-27 Nov 1974.

Five groups of representatives from 19 Latin American countries discussed community participation in the planning of health services and the designing of tasks, strategies for organizing and implementing health programmes in rural areas, means of training and retraining auxiliary personnel and community leaders, new approaches to supervision, and the most important subjects for inclusion in a reference manual for auxiliaries. This document summarizes the conclusions of each group. Lists of participants and concepts and vocabulary used in the discussions are included. (HC-L)

- 4229 Roemer, M.I., Roemer, R.** USA, Department of Health, Education, and Welfare. *Health manpower policies under five national health care systems.* Washington, D.C., Department of Health, Education, and Welfare, Public Health Service, Health Resources Administration, Division of Medicine, DHEW Publication No.(HRA) 78-43, 1978. 60p. Engl.

The implications for US health manpower policy of systems in Australia, Belgium, Canada, Norway, and Poland are studied. The 1st chapter deals with supply, distribution, rural needs, and health manpower planning. The 2nd chapter examines innovative functions of health personnel including the role of specialists, physician extenders, and nurse practitioners. A 3rd chapter on education treats enrollment, trends in medical school curriculum, nursing education, training of allied health workers, and postgraduate and continuing education. The final chapter covers regulatory measures. Topics discussed include approval of curriculum, licensing of health manpower, payment systems, hospital and drug control, patients' rights, and the influence of professional associations. (FM)

- 4230 Timmappaya, A.** *Further education of the health team and its career planning.* Indian Journal of Medical Education (New Delhi), 11, Apr-Sep 1972, 152-157. Engl. 10 refs.

The author suggests that, as health care services become more complex, new approaches to training are needed. Personnel should be prepared to work as part of a team and develop skills in coordination and cooperation. A broader, more multidisciplinary type of education could be reinforced by postgraduate, orientation, in-service, on-the-job, and refresher courses supplemented by conferences and workshops. Modern methods such as case studies should be implemented with greater use of audiovisual aids. Teacher training, a methodology for trainee evaluation, and career planning for the health team will also help to increase its performance and efficiency. (DP-E)

- 4231 UNDP, Geneva.** *Education and training of allied health (paramedical) personnel in the Commonwealth Caribbean.* Geneva, UNDP, Nov 1976. 55p. Engl.
Unpublished document.

In July 1975, the Commonwealth Caribbean Allied

Health Training Project was initiated to develop institutions that could produce adequately and appropriately trained auxiliary personnel for the health services of the region. This document covers the background of the project, the contributions of various Caribbean countries, the institutional framework, the project's objectives, and its working plan, with an outline of projected activities and anticipated contributions from the UNDP and different Caribbean governments. An annex describes the organization of the project. (DP-E)

- 4232 WHO, Geneva.** *Training and utilization of auxiliary personnel for rural health teams in developing countries; report of a WHO expert committee.* Geneva, WHO, Technical Report Series No.633, 1979. 35p. Engl. 12 refs.

WHO Expert Committee on the Training and Utilization of Auxiliary Personnel for Rural Health Teams in Developing Countries, Geneva, Switzerland, 12-16 Dec 1977.

Also published in French, Russian, and Spanish.

This report includes recommendations on expanding the responsibilities of auxiliary health workers to include all aspects of social and community life affecting health. Staffing policies should reflect local conditions, the government should be firmly committed to primary care and local participation should be encouraged. A chapter on the development of rural health teams includes job descriptions, composition of teams, student selection, educational programme development and teaching methods, teacher training, continuing education, management of health teams, and evaluation. National reference centres should be established to undertake research, planning, training, etc., relevant to primary health care and rural health personnel and a national strategy for developing health teams should be outlined. (FM)

- 4233 WHO, Geneva.** *Criteria for the evaluation of learning objectives in the education of health personnel; report of a WHO study group.* Geneva, WHO, WHO Technical Report Series No. 608, 1977. 47p. Engl. 12 refs.

WHO Study Group on Criteria for the Evaluation of Learning Objectives in the Education of Health Personnel, Geneva, Switzerland, 30 Nov-6 Dec 1976.

Also published in French, Russian, and Spanish.

There is a growing concern with improving the efficiency, effectiveness, and relevance of health manpower education, while keeping in mind the fact that health workers are, fundamentally, instruments for providing health care. Health manpower training is merely one of the tools available for expanding and improving health coverage and learning objectives are likewise only tools for guiding the educational process toward relevance to the real health needs and demands of the people. This document discusses the use of learner-oriented educational objectives, examines the basis for identifying and selecting educational objectives, and presents guidelines for evaluating such objectives. (RMB)

- 4234 Zuluaga T., H., Suárez G., M.A., Ospina A., J.J.** *Papel de asistente administrativo de servicios de salud en Colombia y su capacitación. (Role and training of the health services administrative assistant).* Revista de la Escuela Nacional de Salud Pública (Medellín, Colombia), 1(2), Jan-Jun 1975, 33-40. Span.

Colombia has been training administrative assistants for deployment in regional and local hospitals and other welfare institutions at the national school of public health, University of Antioquia, since 1960. This paper outlines in detail the evolution, justification, and objectives of the course and the on-the-job functions of the administrative assistant. (HC-L)

II.2 Organization and Administration

See also: 4288, 4300, 4301, 4313, 4331, 4332, 4333, 4338, 4363, 4484, 4553, 4569, 4671, 4681.

- 4235 Acuna, H.R.** *PAHO's work in 1974-1977: a quadrennial review.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(3), 1978, 189-200. Engl.

This article presents a brief 4-year overview of the activities and policies pursued by the Pan American Health Organization (PAHO) and describes some changes that have taken place. Separate sections cover an evaluation of the 10-year health plan for the Americas, health services, disease control, family health, environmental health, human resources and research, information systems, emergency situations, relations with other agencies, internal reorganization, and technical cooperation among developing countries. An increase of US\$25.4 million in the annual budget is noted. (DP-E)

- 4236 Agarwal, L.P.** *National programme for prevention of visual impairment and control of blindness.* Indian Journal of Ophthalmology (Bombay, India), 25(4), Jan 1978, 1-5. Engl.

The government of India has discarded the concept of a disease-oriented programme in the prevention of visual impairment and control of blindness in favour of a problem-oriented plan of action based on these strategies: 1) eye health education with a view to disseminating information about eye diseases and their prevention through mass media and 2) extending ophthalmic services to all areas of the country, mainly through mobile eye units in rural areas. The organization of ophthalmic services at the peripheral, intermediate, and central levels is described and special problems such as the use of substandard glass, practice by unqualified personnel, and national production of ophthalmic equipment are discussed. (DP-E)

- 4237 Akita, A.L.** *Distinction of primary from secondary health care.* Nigerian Nurse (Lagos), 10(1), Jan-Mar 1978, 11-14. Engl. Refs.
Sixteenth International Council of Nurses Congress, Tokyo, Japan, 30 May-3 Jun 1977.

The distinction between primary and secondary health care is discussed on the basis of the Ghanaian experience.

Primary health care is provided in limited, community-based polyclinics by general practitioners, medical assistants, midwives, nurses, and a new breed of locally-trained, non-professional community health workers. Secondary health care is mainly provided by medical, nursing, and other medical specialists in urban areas. Its operational costs far exceed those of primary care, although it covers only a small part of the population. For practical reasons, primary care should be emphasized, particularly in developing countries. (DP-E)

- 4238 Arias, J.** *Health care in big cities: Bogota.* World Hospitals (Oxford, UK), 13(1-2), Jan-Apr 1977, 83-90. Engl.

Following a political and physical description of Bogota (Colombia), the organization and administration of the city's health services are outlined. Financing, planning, and management of hospitals, health centres, support services, and manpower are included. An evaluation of the major health problems is accompanied by an eight point programme of policy recommendations to increase accessibility of services, protect high-risk patients, improve health administration, and promote social participation. Tables present information on mortality and morbidity, availability of health resources, and financing. (FM)

- 4239 Benyoussef, A., Christian, B.** *Health care in developing countries.* Social Science and Medicine (Oxford, UK), 11(6-7), 1977, 399-408. Engl. 22 refs.

Health care at the most peripheral level consists of simple and effective measures founded on appropriate technology and traditional practices that utilize local resources and manpower and are integrated into the larger health network. A wide range of possibilities exists within this definition. WHO, IBRD, UNICEF, and other groups are actively supporting country health programmes. Applied research to determine needs and factors that influence population coverage and health care utilization has been carried out and the results used in various countries. Examples of primary care programmes in the People's Republic of China, Tanzania, India, Venezuela, Iran, Cuba, Niger, and the Sudan are examined. (DP-E)

- 4240 Boikhan, M.S.** *Pakistan Medico International: social voluntary work through paid workers.* Aspects: the International Journal of Volunteer Services (Washington, D.C.), Action Pamphlet No. 4200.19, 1(4), Dec 1977, 14-17. Engl.

One of the founders of Pakistan Medico International (PMI) describes the history and background of the organization, which is staffed by volunteer professionals and paid auxiliaries recruited from local communities. The activities of the PMI have included running dispensaries, nutrition programmes, mobile health units, a 50-bed hospital, family planning programmes, and emergency health services. Future plans emphasize the construction of a health centre complex that will contain 50 beds, a family planning centre, a preventive medicine centre, an

employment exchange, an adult education centre, and a public library. (DP-E)

- 4241 Carreón, G.G.** *Health care in big cities: Manila.* World Hospitals (Oxford, UK), 13(1-2), Jan-Apr 1977, 69-75. Engl.

This article outlines the provision of health care in Manila, the Philippines. A government plan divides the 5 million inhabitants of metropolitan Manila into six zones, each with a health and sanitation team. Health care is provided at primary, secondary, and tertiary levels with financing supplied by the government by means of a health insurance scheme. Community members have a chance to participate in health care at the primary level. The author discusses government agencies, voluntary groups, the planning process, information systems, and, at some length, problems in the provision of services. Statistical data are included. (DP-E)

- 4242 Castagnino, D.** Centro Paraguayo de Estudios de Población, Asunción. *Programa rural de planificación familiar. (Rural family planning programme).* Asunción, Centro Paraguayo de Estudios de Población, 1972. 35p. Span. Reunión Anual del Consejo Regional de la Federación Internacional de Planificación Familiar, Ottawa, Canada, 7-9 May 1972.

In 1968, the Centro Paraguayo de Estudios de Población adopted a strategy aimed at making family planning information and services available throughout the country. Orientation seminars for national leaders, health professionals, and local leaders were held and family planning clinics were set up in hospitals and urban communities. Rural areas were to be served by units consisting of an urban clinic and four rural outreach posts. This document describes the organization and functions of the rural unit in theory and practice with reference to a pilot project in the Department of Caaguazu. A list of the equipment and personnel required for the unit are included. (HC-L)

- 4243 Charles, B.** *Pharmacie hospitalière. (Hospital pharmacy).* Revue Hospitalière de France (Paris), 41(306), 1977, 1027-1039. Fren. 9 refs.

The authors discuss various aspects of the role and management of a hospital pharmacy. The technical, scientific, and administrative functions of the pharmacist are described, including information on ordering and distributing supplies and preparing prescriptions. The economic aspects of managing a pharmacy are stressed with suggestions for lowering costs. Ideally, a hospital should have 1 pharmacist for every 300 beds. To achieve maximum efficiency and to avoid duplicating services, central groupings of pharmaceutical personnel are suggested. (FM)

- 4244 Correa, F.W.** *Indian railways medical services.* Indian Journal of Public Health (Calcutta, India), 21(1), Jan-Mar 1977, 16-22. Engl.

The organization and administration of the Indian Railways medical services are described. Providing free, comprehensive health care to all railway employees and

their families, Indian Railways operates full-scale hospitals, health units, and mobile dispensaries with a hospital bed ratio of 616:1 000 employees. Medical officers, midwives, and health visitors provide at-home care as well. Outpatient departments have been expanded and priority given to the areas of environmental sanitation, nutrition, communicable disease control, health education, and family planning. (FM)

- 4245 Cuba, Ministère du Travail, Direction de Sécurité Sociale.** *Cuba: son système de sécurité sociale. (Cuba: her social security system).* Havana, Ministère du Travail, Direction de Sécurité Sociale, Nov 1974. 31p. Fren.

This document briefly discusses the origins, organization, and components of the Cuban social security system; it includes a short summary of achievements in the public health sector since the revolution. (HC-L)

- 4246 Dashbach, C.C., McLeod, W.B.** *Medicine in Mexico; VII: rural health care delivery.* Arizona Medicine (Scottsdale, Ariz.), 35(3), Mar 1978, 187. Engl.

The problem of providing health care for rural areas is discussed in this outline of the organization of health services in Mexico. At present, 84.4% of the rural population is served only by traditional folk-healers, midwives, and pharmacists. A theoretical organizational structure is described that would include 1 urban coordinating hospital, 5 suburban health centres, 15 health centres, and 90 rural health posts to serve a rural population of up to 200 000. Two pilot projects, one in the mountainous state of Chiapas and the other covering several states in the Sierra Madre Occidental, reflect the main difficulties (inaccessibility and resistance to change) in meeting the health needs of the rural poor. (FM)

- 4247 de Ville de Goyet, C., Seaman, J., Geijer, U.** WHO, Geneva. *Management of nutritional emergencies in large populations.* Geneva, WHO, 1978. 98p. Engl. Refs.

These guidelines for the field management of severe, widespread nutritional crises stress the importance of measuring nutritional status during an emergency and preventing major deficiency diseases. Separate chapters discuss food distribution, mass and supplementary feeding programmes, therapeutic feeding, and the preparation of special food supplements. The control and surveillance of infectious diseases are also covered and a final chapter examines the administration of emergency services including personnel, transportation, and food storage. Appendices outline information on nutritional requirements, protein content of foods, and measurement techniques. (FM)

- 4248 Fajardo Ortiz, G.** *Health care in big cities: Mexico City.* World Hospitals (Oxford, UK), 13(1-2), Jan-Apr 1977, 76-82. Engl.

This article outlines the provision of health care for the 7 million inhabitants of Mexico City. After supplying information on demography, vital statistics, economics,

education, housing, clothing, and nutrition, the author lists and classifies the various health care organizations on the basis of their system of financing. Finally, he deals with the many problems confronting the delivery of health care in this city. Statistical data are included. (DP-E)

- 4249 Gasmen, S.** *Reaching out to improve health and welfare at the barangay level.* Philippine Journal of Nursing (Manila), 46(3-4), Jul-Dec 1977, 162-170, 214. Engl.

The most common problems in rural areas of the Philippines are malnutrition, infectious diseases, environmental health, infant mortality, dental health, mental health, and accidents. The author discusses attempts that have been made to solve these problems, examining the roles of government agencies and departments, national and local civic organizations, and international aid programmes, especially the Red Cross. He then makes suggestions for improving the delivery of health services, including the need to educate the rural population in health and technical skills and to train local health workers. (DP-E)

- 4250 Gutmacher, S., Danielson, R.** *Changes in Cuban health care: an argument against technological pessimism.* International Journal of Health Services (Westport, Conn.), 7(3), 1977, 383-400. Engl. 28 refs.

The Cuban experience should be of particular interest to the Third World, because, although more resources have been directed to the health and social services than in other developing countries, it was largely through the reorganization and equalization of the prerevolutionary system that improvement in the health status of the population was achieved. The success of the Cuban system proves that it is possible to combine technical development with improvement in the humane quality of care. (RMB)

- 4251 Hassinger, E.W., Whiting, L.R. ed(s).** University of Iowa, North Central Regional Center for Rural Development, Ames, Iowa. *Rural health services: organization, delivery, and use.* Ames, Iowa, Iowa State University Press, 1976. 308p. Engl. Refs.

This volume, containing 16 articles by different authors, describes and analyzes the present situation of rural health care and the delivery of health services in the USA and discusses specific means for meeting the problems involved. The articles cover a wide range of topics, including the history of rural health services, health needs of rural societies, distribution of health manpower, transport and communications, organization and planning, analytical models, consumer involvement, etc., and the book concludes with a look to the future. (DP-E)

- 4252 Hirota, Y., Giri, J.N., Maskay, N.L., Baidya, B.R., Bajracharya, G.M.** *Tuberculosis control programme in Nepal (part I).* Kurume Medical Journal (Kurume, Japan), 24(2), 1977, 81-86. Engl. 13 refs.

See also entry 4302.

With Japanese assistance, the government of Nepal has developed a programme to control tuberculosis by reducing the pool of infection and providing BCG vaccinations for children aged less than 15 years. Diagnostic and therapeutic procedures are outlined and the authors examine present-day attitudes toward case-finding methods, diagnosis, direct smear sputum examination, and treatment. It is noted that chest X-ray examination has become less useful as a means of diagnosing pulmonary tuberculosis; direct smear sputum examination is the favoured method. (RMB)

- 4253 Horsey, J.** *Medicine amongst the mountains: the medicine of poverty.* Practitioner (London), 220(1315), Jan 1978, 125-129. Engl.

Some of Nepal's common diseases and the nature of the health care system are discussed. Traditional medicine still plays a major role in the diagnosis and treatment of disease, although modern methods are being introduced as more hospitals are built and put into operation. The training of auxiliary health workers and nurse-midwives is emphasized. Poor water supplies have led to a prevalence of dysentery; other major diseases include leprosy and tuberculosis. A massive family planning programme is underway, but its success depends upon reducing the high infant mortality rate. Social problems, resulting from increased contact with the West, are becoming more frequent. (FM)

- 4254 Indian Council of Medical Research, New Delhi.** *Indian Council of Social Science Research, New Delhi. Alternative approaches to health care.* New Delhi, Indian Council of Medical Research, 1976. 242p. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

Individual chapters have been abstracted separately under entries 4267, 4277, 4319, 4363, 4500, 4501, 4502, 4505, 4514, 4518, 4519, 4565, 4661, 4773, 4864, and 4883.

The 1st part of this document contains the papers presented at the 1976 symposium on alternative approaches to health care. They cover: a number of projects dealing with nutrition, child health, community health, etc.; a scheme of subsidized medical care based on a self-sustaining system of health cooperatives; community health care; and a general review. The 2nd part reviews ongoing projects on alternative health care systems. Appendices comprise a glossary and a list of abbreviations, a list of participants, and guidelines on methodology and parameters for assessment to be followed in field operational research studies on health care delivery systems. (RMB)

- 4255 Joo, S.** *Role of the DED (German Development Service) in the health service of its host countries.* Aspects: the International Journal of Volunteer Services (Washington, D.C.), Action Pamphlet No. 4200.19, 1(4), Dec 1977, 8-13. Engl.

Some 20% (100-140) of the German Development Service's (DED's) volunteers are health professionals, main-

ly nurses, who are deployed mostly in rural areas of recipient developing countries. These nurses are frequently forced to assume greater responsibility for diagnosis and treatment in areas where there are no physicians. Because of the difficulties of transferring Western technology to developing countries, the DED restricts its contribution to personal, rather than material, aid to underprivileged populations. Examples of projects in various countries are given and the importance of traditional medicine is emphasized. (DP-E)

- 4256 Louie, R.** *Dental care in the People's Republic of China.* Medical Care (Philadelphia, Pa.), 16(7), Jul 1978, 584-597. Engl. 14 refs.

The author examines the delivery of dental health care in the People's Republic of China; generally it is available at the district hospital or factory or commune clinic. The classification and salary level of dental manpower are examined. The financing of health care and different kinds of insurance programmes, which also cover dental care, are discussed and the training programmes and curricula of dentists, dental nurses, and dental technicians are described. The diet of older children seems to discourage the development of caries, although oral hygiene is generally poor. Finally, the use of acupuncture analgesia and therapy is considered. (DP-E)

- 4257 Maiga, A.** *Essai de rationalisation des commandes de médicaments dans les dispensaires ruraux du Niger. (Proposed criteria for ordering drugs in rural dispensaries in Niger).* Développement et Santé (Paris), (13), 1978, 14-16. Fren.

Criteria for ordering drugs in rural dispensaries in Niger are described. Factors to be taken into account include the distribution and make-up of the population, particular needs of the community, and budget restraints. Information is given on how to choose the most appropriate medicine, taking into account its format and ease of preparation and transportation. Administrative aspects, as well as information on storage and reordering, are also discussed. (FM)

- 4258 Markides, A.A.** Cyprus, Ministry of Health. *Annual report of the Medical Department for the year 1977.* Nicosia, Ministry of Health, 1977. 1v.(various pagings). Engl.

During 1977, in addition to coping with the medical demands of refugees from occupied parts of the island, Cyprus inaugurated new activities in the area of hospital services, geriatric services, anaemia control, and school health services and continued to work toward a national medical scheme. This document summarizes services rendered in these and other areas of the health sector; the appropriate statistical data are appended. (HC-L)

- 4259 Marzouki, M.** *Hygiène et prévention de masse: l'expérience chinoise. (Hygiene and mass prevention: the Chinese experience).* Tunisie Médicale (Tunis), 55(2), Mar-Apr 1977, 109-112. Fren.

Health and politics are closely related in the People's Republic of China, where unique solutions to the problems of providing health care to a widely scattered rural

population seem to have been found. More than one million barefoot doctors supplement the work of professionals. Concentrating on preventive medicine, Chinese health workers have organized numerous mass campaigns to teach the fundamentals of health and hygiene. Features of traditional medicine such as acupuncture and medicinal plants have been incorporated into the system. The description of a teaching hospital illustrates the practical nature of Chinese medical training, which, like the entire health system, is based on the concepts of quantity, quality, speed, and economy. (FM)

- 4260 Medserco Incorporated, St. Louis, Mo.** *Community health resource centre; an opportunity to integrate primary care and public health services for economic development.* St. Louis, Mo., Medserco Incorporated, n.d. 6p. Engl.

Medserco Incorporated, an American-based member of the International Health Resources Consortium, aims to further local initiatives in primary health care by assisting in the design and construction of community health resource centres (i.e., facilities for the provision of basic integrated health services). To ensure the appropriateness and potential for economic viability of such centres, they are to be under the policy control of a board of managers composed of local health professionals, community leaders, and businessmen; managerial and technical expertise will be provided by Medserco as required. This document explains the rationale for the Medserco approach to international development and where to apply for further information concerning it. (HC-L)

- 4261 Molina, G., Turizo, A., Cardona, J.** *Programa local integrado de salud y bienestar en Antioquia. (Local integrated health and welfare programme in Antioquia).* Revista de la Escuela Nacional de Salud Pública (Medellín, Colombia), 1(2), Jan-Jun 1975, 29-32. Span.

Integración Operacional de Abajo hacia Arriba (IOPAA) designates an effort on the part of service and teaching organizations in Antioquia, Colombia, to promote modern integrated health, welfare, and medical programmes at the local level in fullest cooperation with local functionaries and the community. This paper outlines the origin, bases, content, and organization of the IOPAA with reference to its application in an urban-rural service area in Antioquia. (HC-L)

- 4262 Odongo, E.A.** *Role of the venereal disease laboratory, Mulago Hospital, Kampala in the diagnosis of sexually transmitted diseases in Uganda.* East African Medical Journal (Nairobi), 54(7), Jul 1977, 385-392. Engl. 16 refs.

The incidence of sexually transmitted diseases diagnosed at the venereal disease laboratory of Mulago Hospital, Kampala, Uganda, is reported. An account of the laboratory methodology used in processing specimens is given, including standardization of tests and treatment. The importance of proper collection and speedy delivery of the specimens to the laboratory is emphasized. Some of the local operational problems are highlighted and

remedies suggested. Statistical data are included. (Modified journal abstract.)

- 4263 Ozarin, L.D., Samuels, M.E., Biedenkapp, J.** *Need for mental health services in federally funded rural primary health care systems: a review of rural health initiative-health underserved rural area projects and their relationship with community mental health centers.* Public Health Reports (Rockville, Md.), 93(4), Jul-Aug 1978, 351-355. Engl. 10 refs.

A number of sources of funds are available to nonprofit agencies or groups to provide primary health care in rural USA. Mental health problems, however, are generally neglected. Professional and mid-level clinicians should be trained to recognize and treat emotional illness and mental health personnel should be part of every primary health care team. In this way, mental health services can be extended to a much wider population. (DP-E)

- 4264 Pan American Health Organization, Washington, D.C.** *Report of the director: quadrennial 1973-1977; annual 1977.* Washington, D.C., Pan American Health Organization, Official Document No. 158, Aug 1978. 211p. Engl.

The quadrennial report (1974-1977) and the annual report (1977) of PAHO's Director describe the activities carried out at headquarters and by regional offices. It includes chapters on disease control, environmental health services, family health, human resources, research development and coordination, supporting services, external relations, administrative management, and special meeting and governing bodies. Detailed information on projects underway is not included. (DP-E)

- 4265 Pope, F.** *North Carolina region D health maintenance project.* Springfield, Va., National Technical Information Service, 27 Sep 1974. 1v.(unpaged). Engl.

The major thrust of this project was to unite two types of management systems in rural North Carolina (USA). The 1st system was to facilitate access to existing services for individuals with unmet health needs and to establish linkages among several health programme activities. Programmes to be linked within the seven counties of Region D were to include family intake, child health, and mental health. Special emphasis was to be directed toward identifying and providing for access for high-risk individuals, as well as improving the overall efficiency of health services through the development of a personal health monitoring system. A health agency management system was to be the 2nd system and would oversee the entire health delivery system in these seven counties. (Modified journal abstract.)

- 4266 Pugh, A.O.** *Aspects of rural health V: better maternity services.* Central African Journal of Medicine (Salisbury), 24(6), Jun 1978, 123-125. Engl.
See also entries 3580 (volume 6), 4230, 4372, 4453, 4454, and 4516.

A number of factors must be considered by health planners attempting to raise the quality of maternity services in rural areas of Rhodesia. Pregnant village housewives have their usual chores to perform and visits to the clinic should be kept to a minimum. Because of possible transport problems in urgent deliveries, expectant mothers should be given accommodations at the hospital for several weeks before the delivery during which time the feeding and care of infants can be taught. Small rural clinics could provide more postnatal rest and further education. Health cards with birth and immunization information and a date for the 1st visit to the clinic should be issued on discharge. (DP-E)

4267 Ramachandran, L. *Alternatives to health care systems.* In *Alternative Approaches to Health Care*, New Delhi, Indian Council of Medical Research, 1976, 163-176. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

The author examines alternatives to India's present primary care system of rural health centres and subcentres. These alternatives include: ambulatory health care delivered by auxiliaries and supported by the community; changes in the training of presently deployed auxiliaries, especially the incorporation of *dais* into the system; better utilization of available physicians; the establishment of an effective referral system; prohibition of private practice by government medical officers; tertiary medical care; community participation; etc. Criteria for evaluating these alternatives are presented. An outline of an alternative plan for reorganizing India's health services is contained in an appendix. (RMB)

4268 Ramakrishnan, N.R. *Health services in India.* *Indian Journal of Public Health* (Calcutta, India), 20(4), Oct-Dec 1976, 161-168. Engl.

The organization of health services in India is outlined and recommendations for improvements are made. Major problems include the inadequacy and poor distribution of health facilities, the shortage of trained personnel, and spiraling costs. Government policy aimed at solving some of these problems favours the increased construction of facilities as well as the establishment of health insurance schemes. Medical education should emphasize community health and the training of health teams including a greater number of auxiliary workers. A licensing system similar to the UK's would improve the distribution of physicians in rural areas. (FM)

4269 Reksoprodjo, H.S. *Orthopedic problems in Indonesia.* *International Surgery* (Chicago, Ill.), 63(6), Sep-Dec 1978, 73-75. Engl.

The history of orthopaedic rehabilitation services in Indonesia is traced. Since there are only 26 orthopaedic surgeons to serve a population of 130 million, many problems are still handled by traditional bone setters (*dukun patah*). Hospitals see mostly advanced cases, which are easy to diagnose but difficult to manage. Common problems include trauma, infection (osteomyelitis, tuberculosis, leprosy), congenital abnormalities,

bone tumors, and degenerative diseases such as osteoarthritis and scoliosis. (RMB)

4270 Riley, C. *Hospital maintenance in developing countries.* *Lancet* (London), 2(8091), 23 Sep 1978, 669-671. Engl.

For a variety of reasons, hospitals in the developing world are often not prepared to deal with equipment maintenance. Subsequent equipment breakdowns have an adverse effect on the entire health care system. Present training programmes can only make a small impact on the problem and such programmes must be organized on a national basis. Developed countries can assist by providing funds and instructors. The author cites the experience of Swaziland to support his arguments. (DP-E)

4271 Romano, T.L., Eisenberg, S., Fernández-Caballero, C., Cayten, C.G. *Paramedic services: nationwide distribution and management structure.* *Journal of the American College of Emergency Physicians* (East Lansing, Mich.), 7(3), Mar 1978, 99-102. Engl.

University Association for Emergency Medicine Annual Meeting, Kansas City, Mo., May 1977.

A paramedic clearinghouse to provide information on the status of advanced life support systems in the USA has been established at the Centre for the Study of Emergency Health Services, University of Pennsylvania. A total of 310 paramedic services were identified and categorized by location, population served, and management structure. A survey of the operations, paramedic education and certification, and the organization of the financing of these services is planned. Statistical data are included. (DP-E)

4272 Sanjivi, K.S. *Interface between health team and the community: health team leader's view.* *Indian Journal of Medical Education* (New Delhi), 11, Apr-Sep 1972, 192-194. Engl.

Drawing on his experience in running a primary health centre in Madras, India, the author offers suggestions on how a health team can best meet its objectives. For example, health centres should be permanent and community-based, employing paramedics who live in the community and are supported by community financial contributions. The health centre team should seek the cooperation of the community, the hospitals, and voluntary agencies. A comprehensive health care programme, including curative and preventive medicine, is essential. The quality and quantity of staff are important, as are such details as providing them with adequate transportation, usually bicycles. (DP-E)

4273 Sidel, V.W., Sidel, R. *Self-reliance and the collective good: medicine in China.* In Veatch, R.M., Branson, R., eds., *Ethics and Health Policy*, Cambridge, Mass., Ballinger, 1976, 57-75. Engl. 17 refs.

Health care practices in the People's Republic of China exhibit a unique blend of individual and collective responsibility. Cities are divided into small groups of citi-

zens who shoulder the responsibility for the important aspects of their daily lives, including health care. Professionals are selected from the community and return there after training. Paramedicals are involved in sanitation, immunization, birth control, and some technical matters. Patients are expected to participate in their own care and to help each other. The general population has often been mobilized in campaigns against diseases. Guided by the principle that health is everyone's concern, the Chinese have achieved a high standard of health care. (DP-E)

- 4274 Silver, H.K., McAtee, P.R.** *Descriptive definition of the scope and content of primary health care.* Pediatrics (Springfield, Ill.), 56(6), Dec 1975, 957-959. Engl. 11 refs.

The authors offer a brief definition of primary care: "Primary health care includes the initial contact of the patient with the health care system and is high-quality, comprehensive, individualized, quickly responsive, and readily accessible care that is patient-oriented, easy to use, and based on a firm foundation which integrates knowledge of the medical, biological, physical, social, psychological, and behavioural sciences." They analyze this definition and consider primary health care from the perspective of government, medical specialists, the public, educational institutions, and nurses. (DP-E)

- 4275 Starling, A.E.** *Health care in big cities: Hong Kong.* World Hospitals (Oxford, UK), 13(1-2), Jan-Apr 1977, 60-67. Engl.

A study of the organization and administration of health services in Hong Kong focuses on hospital facilities. Number and distribution of beds, staffing, financing, and new construction are discussed. Future plans call for a regional organization that would provide a major hospital, one or more district hospitals, specialist clinics, and general clinics for each of four regions. Other topics briefly mentioned include mental health services, dental care, drug abuse, and emergency services. The author feels that the problems of overcrowding, inadequate housing, lack of space, and the difficulty of recruiting, training, and retaining skilled staff are serious but not insurmountable. (FM)

- 4276 Thailand, Ministry of Public Health.** *Primary health care in Thailand.* Bangkok, Ministry of Public Health, 1978. 31p. Engl. 39 refs. International Conference on Primary Health Care, Alma Alta, USSR, 6-8 Sep 1978.

This paper describes the health, socioeconomic, geographical, and cultural situation in Thailand in the context of the primary health care plan. After reviewing the plan's background, it outlines the major objectives: free medical service, increased personnel, greater public participation, control of drug addiction, and improved nutritional status. Village organization is emphasized. Some specific projects demonstrate the variety of programmes underway. These include an integrated, low-cost health delivery system directed at women and children aged less than 6 years, nutrition education, an integrated rural development programme, and a training programme for

village health workers. The problems encountered in these projects are discussed and conclusions concerning an integrated approach to community development are presented. (FM)

- 4277 Timmappaya, A., Rao, K.G.** *Indian experiments in delivery of health care—a review and identification of needed areas of study.* In Alternative Approaches to Health Care, New Delhi, Indian Council of Medical Research, 1976, 179-190. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

Indian health care projects are reviewed and classified into four areas: nutrition and maternal child health, hospital-based and -funded, comprehensive health care, and schemes of subsidized medical care based on a system of health cooperatives. Projects found in the 1st category include the Poshak, Kasa Model, Indo-Dutch, and Village Child Care Centre projects; in the 2nd, the Harriet Benson Memorial Hospital, the Padhar Hospital, and the Himachal Pradesh Hospital projects; in the 3rd, the Jamkhed, Mandive, and Miraj projects; and in the 4th, the Manipal Medicare Plan, the Kerala health cooperatives, and the Mallur projects. The authors also identify needed areas of study. (RMB)

- 4278 Valdivia Domínguez, A.** *Stimulating community involvement through mass organizations in Cuba: the women's role.* International Union of Health Education (Geneva), 20(1), 1977, 57-60. Engl.

Ninth International Conference on Health Education, Ottawa, Canada, 29 Aug-3 Sep 1976.

Also published in French and German; for complete document see entry 4539.

Public health services in Cuba are based on the principles that the state has responsibility for the health of the people, that health services must be provided to the total population, and that health care should be both preventive and curative. Mass organizations were formed to stimulate public participation in health programmes in the fields of environmental health, vaccinations, physical examinations, and health education programmes. In 1960, the Federation of Cuban Women (FMC) was created to train and educate women concerning health and hygiene; they form an important link between the Ministry of Public Health, the mass organizations, and the community. (AF)

- 4279 Verma, S.A.** *Operations research for improved delivery of health services on the Indian railways.* Indian Journal of Public Health (Calcutta, India), 21(2), Apr-Jun 1977, 105-107. Engl.

To improve the administration of the health department of the Indian Railways, operations research on quantitative management techniques was introduced as early as 1966 and expanded in 1974. Training courses were arranged for senior medical officers and later included all doctors. Practical courses involved auxiliary personnel as well. More efficient management resulted in reduc-

tions in waiting time of patients, average length of stay, and work load:doctor:day in the outpatient department. Statistical data are included. (FM)

4280 Viedma, C. *Disaster alert.* World Health (Geneva), Jun 1978, 14-17. Engl.

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

The need to coordinate relief funds and activities is emphasized by descriptions of the consequences of recent disasters in Guatemala, India, and the Sahel. UNDRO, the United Nations Disaster Relief Office, was created to fill this need. After evaluating the extent of the emergency, the office collaborates with other agencies involved—FAO if the disaster affects crops, WHO if the health situation is critical. Management of funds and supplies from donor countries is also undertaken. However, more and more emphasis is being placed on the prevention of disasters through better organization of early warning systems, heightened public awareness and participation, and legislation to control industrialization. (FM)

4281 Villegas, H. *Extensión de la cobertura de salud en Costa Rica. (Extension of health coverage in Costa Rica).* Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 83(6), Jun 1977, 537-544. Span.

Also published in English in *Bulletin of the Pan American Health Organization* (Washington, D.C.), 11(4), 1977, 303-310.

Costa Rica's national health plan for 1971-1980 has given top priority to extending services to marginal rural and periurban areas, moving from the rural to the urban. By mid-1977, 220 rural health posts were serving 81% of the dispersed rural population and a coverage of over 90% was anticipated by the end of that year; efforts during 1978-1980 are expected to focus on providing fuller coverage for people in the more densely settled areas. This paper reviews the plan, the legal foundation for its implementation, the rural community health programme, the urban programme, and some indicators of improvement in health status over the past decade. (HCL)

II.3 Planning

See also: 4247, 4251, 4265, 4275, 4380, 4474, 4486, 4516, 4578, 4616, 4617, 4637, 4685, 4687.

4282 Abel-Smith, B., Leiserson, A. WHO, Geneva. *Poverty, development, and health policy.* Geneva, WHO, WHO Public Health Papers No. 69, 1978. 109p. Engl.

Also published in French.

The improvement of health is an essential element of national development and this book describes ways in which work in the health sector can support the national planning of rural development for the relief of poverty. In the 1st part, which is concerned with the interdependence of health policy and national planning, the book treats poverty as one of the main causes of low health

standards and shows how health administrators can help to improve the standard of living. The 2nd part deals with the economics of health services, including financing and cost-effective and cost-benefit analysis; the final chapter, on low-cost services, stresses the need for local involvement. (RMB)

4283 Amsyari, F., Katamsi, E. *Status of health knowledge and patterns of seeking health advice in rural East Java.* International Journal of Health Education (Geneva), 21(1), Jan-Mar 1978, 34-40. Engl.

Following a general review of the organization of health services and medical schools in East Java, the steps being taken to develop a comprehensive approach to health education are discussed. Studies of existing resources, national and regional priorities, health-related knowledge of the population, and patterns of seeking health advice in the community form the basis for the recommendations made. The health education service model developed from these studies emphasizes the education of key persons in the community, namely the village administrators, who are more likely to be consulted than rural health personnel. Yearly evaluations of the impact of this approach are planned. (FM)

4284 Angara, A.A., Cortes, J.P., Mercado, R.D., Paz, E. *Health planning in the Western Pacific.* Manila, WHO, Public Health in the Western Pacific, No. 2, 1977. 214p. Engl.

Designed as a technical manual, this book outlines a methodology for national health planning. The basic steps of the planning process include diagnosis, formulation, implementation, and evaluation. The 1st, situational analysis, involves population studies and analysis of economic, social, and environmental factors, health resources, and disease levels in order to identify the problems. Plan formulation includes establishing general health policies, drafting the overall health service design, planning individual programmes, and identifying technical areas for project development. During the implementation phase, planners must concern themselves with preparatory activities at the various administrative levels and with the actual delivery of health services. The final stage involves careful evaluation of the plan impact on the health status of the country. (FM)

4285 Backett, E.M. *Health policy issue: major changes in our understanding of health problems.* Bulletin of the Pan American Health Organization (Washington, D.C.), 11(1), 1977, 65-72. Engl.

Changes in the health care scene over the last 50 years present a singular challenge to traditional concepts of health and disease. The author uses three examples of such changes from different cultures to illustrate that new strategies in health care planning are overdue. Recommended new strategies emphasize social participation, primary care, preventive medicine, the simplification and demystification of medical care, the development of low and intermediate technologies, and the

training of health workers to meet the needs of the populations they serve. (DP-E)

- 4286 Barker, W.H.** *Perspectives on acute enteric disease epidemiology and control.* Bulletin of the Pan American Health Organization (Washington, D.C.), 9(2), 1975, 148-156. Engl. 50 refs.

Annual mortality rates from enteric diseases range from 10:100 000 in highly developed countries to as high as 500:100 000 in developing countries. Most agents of enteric disease are spread by direct person-to-person contact or by ingestion of contaminated food or water. An effective control programme should therefore focus on common epidemiological factors rather than on traditional agent-specific measures such as antibiotics or vaccines. The programme should include oral fluid replacement therapy, environmental sanitation improvements, health education, and epidemiological surveillance. (DP-E)

- 4287 Bradley, D.J.** *Improvements of rural domestic water supplies.* Proceedings of the Royal Society of London, Series B: Biological Sciences (London), 199 (1134), 1977, 37-47. Engl. 18 refs.
Royal Society Discussion of Technologies for Rural Health, London, UK, 9-10 Dec 1976.

The preoccupation with quality engendered by modern water technology may be inappropriate to the rural tropics where settlements are scattered. Since improved health is usually the main reason for improving water supplies, rational expenditures of the limited funds for improvements requires an analysis of the relation of diseases to water and flexibility and diversity in planning. The technologies involved in rural water supply are reviewed. Once improvements have been made, maintenance is a major problem and, in rural areas, the social as well as the technological aspects of water supply are also important. Increasing weight is now given to self-help approaches. (Modified journal abstract.)

- 4288 Bryant, J.H., Ginsberg, A.S., Goldsmith, S.B., Olendzki, M.C., Piore, N. ed(s).** *Community hospitals and primary care.* Cambridge, Mass., Ballinger, 1976. 399p. Engl.
Individual chapter has been abstracted separately under entry 4341.

This report of the Community Hospitals Ambulatory Care (CHAC) Project (Columbia University, New York) covers ambulatory care issues in the USA, changing practice modes, rural primary care and the rural hospital, utilization of and primary care arrangements in community hospitals, the Columbia survey of community hospitals, alternative approaches and practical considerations for changing ambulatory services, the outpatient department, economic aspects, development of a data system, scope of services and manpower planning, health manpower issues, and future directions in ambulatory care. Appendices include references, tables, project questionnaires, methodology of the Columbia survey, and CHAC meetings and working papers. (RMB)

- 4289 Butrico, F.A.** *Environmental health and technical cooperation among developing countries.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(2), 1978, 124-129. Engl. Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*.

Faced with the reality that it is expensive and inefficient to adapt much of Western technology and that appropriate technology must be developed, Third World countries have increasingly cooperated with each other on technical matters. This article discusses the progress and strategy of this cooperation and describes PAHO's efforts to strengthen this trend, especially in the field of environmental health. These efforts include a project to establish a cooperative information network, a training course for water management personnel in the Caribbean, a project to promote the technical development of water supply and sewerage institutions, etc. (DP-E)

- 4290 Campbell, A.V.** *Medicine, health and justice; the problem of priorities.* Edinburgh, Churchill Livingstone, 1978. 100p. Engl. Refs.

This book examines the fundamental ethical problem in contemporary health care: since demands for health services constantly exceed available resources, how can priorities be determined? Separate sections cover ethics and priorities in medicine, the paradox of freedom, equality and equity, power and participation, and justice and health care. Most examples are taken from the UK, but some mention is made of the approaches to this problem that have been attempted in the USA, the USSR, and the People's Republic of China. There are an index and two appendices containing the UN declaration of human rights and WHO's principles of primary care. (RMB)

- 4291 Casparis, W.** *Rural health care: problems and solutions.* Hospital Forum (Los Angeles, Cal.), 9(2), Jul 1976, 8-9, 30. Engl.

The focal point for planning rural health care in the USA is usually the local hospital. Its administration should reflect a broad cross-section of the community, or a fully representative organization should be established before effective planning can begin. Improvements should focus on the three main areas of physicians, facilities, and finances. Objectives in each area should be specific and responsibilities and time-frames clearly defined. Suggestions on organizing financial resources are also given. All aspects of planning should emphasize strong local organization, leadership, and coordination. (FM)

- 4292 Christian Medical Commission, Geneva.** *Position paper: declaration of the Africa Coordinators' Conference, Mombasa, Kenya, 18-21 February 1975.* Geneva, Christian Medical Commission, 1975. 3p. Engl.
Africa Coordinators' Conference, Mombasa, Kenya, 18-21 Feb 1975.
Unpublished document.

The February 1975 meeting of the Africa Coordinators' Conference of the Christian Medical Commission presented positions on a number of issues. The conference

called for the recruitment and training of African coordinators. Concern was expressed that the existing church-related hospitals were financially vulnerable and options for solving this problem were given. The conference participants felt that the present health care system was financially vulnerable and that the vast majority of Africans could not be reached by it. They suggested that future health programmes should focus on communities, use local resources, and emphasize primary care. (DP-E)

- 4293 Commonwealth Secretariat, London.** *Report of the Fifth Commonwealth Medical Conference, Wellington, New Zealand, 15-25 November 1977; volume 1.* London, Commonwealth Secretariat, 1977. 122p. Engl.

Fifth Commonwealth Medical Conference, Wellington, New Zealand, 15-25 Nov 1977.

This report of the 5th Commonwealth Medical Conference contains an agenda, opening and closing addresses and speeches, country statements from each nation participating, and a review of the actions taken following the 4th conference in such areas as health manpower migration, maintenance and repair of medical equipment, pharmaceuticals, and abortion. Further recommendations are made concerning community participation, the role of health ministries and medical schools, changing health care delivery systems, and enhancing Commonwealth collaboration in the health sector. (DP-E)

- 4294 Cvjetanovic, B.** *Gulf of Guinea.* World Health (Geneva), Jun 1978, 19-21. Engl.

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

A central water quality programme, supported by WHO, is being established to monitor and control pollution in the Gulf of Guinea. The 19 African countries involved will work with WHO to set up laboratories and train workers to detect microbial, chemical, and other pollutants now being discharged into the sea from domestic and industrial sources. Improvements in environmental and food sanitation and the provision of safe drinking water will also be stressed. The 4 stages of the programme involve assessing the degree of pollution, determining water quality criteria, defining "acceptable risk," and developing appropriate strategy and legislation. (FM)

- 4295 Drobny, A.** *Health; an essential component of long term economic and social development.* International Journal of Health Education (Geneva), 20(1), Jan-Mar 1977, 38-40. Engl.

Ninth International Conference on Health Education, Ottawa, Canada, 29 Aug-3 Sep 1976.

Also published in French and German; for complete document see entry 4539.

Because health is an essential component of long-term economic and social development, these programmes must be coordinated. In most developing countries of Latin America where large rural populations suffer from economic stagnation, under-employment, poor educational opportunities, etc., economic and social development can be improved by direct production (agriculture,

industry, mining, etc.), economic infrastructure (roads, electricity, etc.), and social development (health, education, housing, etc.). Wider use of paramedical and auxiliary personnel as well as community participation and involvement are also encouraged. In some countries, assistance provided by international lending institutions is being used to expand health services. (AF)

- 4296 Duhl, L.J.** *Future of health services for children.* Ekistics (Athens), 45(272), Oct 1978, 352-353. Engl.

The author feels that health services for children should be neither curative nor preventive in nature but rather a reflection of the relationship between the environment in which the child lives (cultural, climatic, urban or rural, etc.) and the process of normal growth and development. When treating illness in both children and adults, the health care system should return the patient to a contextual situation that will lead to his further development and growth. Often, this process can be better carried out by traditional healers (shamans), who involve the family and community in the healing process, than by Western systems that concentrate on planning more buildings, equipment, management schemes, and financing procedures. (AF)

- 4297 el-Batawi, M.** *Work-related diseases.* World Health (Geneva), Jun 1978, 10-13. Engl.

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

The results of various studies of occupational health and work-related diseases are discussed. Concentrating on health problems that are aggravated by working conditions, the study reviews hypertension, peptic ulcers, rheumatic diseases, and coronary heart diseases. In the majority of the cases studied, occupational hazards such as stress, exposure to chemical irritants, and joint strain were found to be the major causative factor. Suggestions are made for preventive measures such as pre-employment screening for high-risk people, regular physical examinations, and improvement of the working environment. (FM)

- 4298 Fetter, R.B.** *Institute for Social and Policy Studies, Yale University, New Haven, Conn. Planning models for health care systems.* New Haven, Conn., Yale University, Institute for Social and Policy Studies, Health Services Research Program, Technical Report No. 54, 1972. 19p. Engl.

Distributed by National Technical Information Service, Springfield, Va.

In assessing the capability of planning methods for dealing with health care delivery problems, three basic areas must be examined: expected consumption of resources, effectiveness of alternative structures, and allocation of resources based on budgetary and other constraints. This article describes some components of a modeling system that deals with this general planning problem and illustrates their implementation. (DP-E)

- 4299 Forster, F.** *Hospital transport for rural patients.* Health Bulletin (Edinburgh), 35(5), 1977, 259-265. Engl.

The difficulties of devising convenient and economically sound solutions to the travel problems facing rural hospital patients are examined. The role that the ambulance should play is not clear and the position of the hospital care service is enigmatic. There is also uncertainty about the nature of transport innovations that may emerge from present policy discussions: the effects of rising costs on car ownership and use are obscure. Resolution of these issues is a prerequisite to sound planning. (Modified journal abstract.)

- 4300 Giel, R., Workneh, F.** *Mental illness and its management in Ethiopia.* Ethiopian Medical Journal (Addis Ababa), 15(2), Apr 1977, 83-98. Engl. 9 refs.

The epidemiology of mental disorders in Ethiopia, including psychoneuroses and personality disorders, chronic mental handicaps, and functional psychoses, is described. Since Western forms of treatment (i.e., mental hospitals) are expensive and ineffective, four criteria for priority selection of treatment methods in developing countries are suggested: prevalence, evidence of community concern, seriousness, and susceptibility to management. Properly organized mental health services should provide treatment in or close to the patient's community and intervention in the early stages of the illness and with the involvement of relatives. Suggestions for improving psychiatric hospital services are included. (DP-E)

- 4301 Gunaratne, V.T.** *Primary health care: an international perspective.* Comparative Medicine East and West (New York), 6(1), 1978, 5-13. Engl.

This paper briefly reviews health status and the reasons for poor health coverage in WHO's South East Asia Region. It then discusses the basic principles and concepts of primary health care, particularly community participation and multi-sectional action. Eight essential steps to the implementation of primary health care at the village level, which can be modified to suit the political and local characteristics of a given situation, are set forward. These include establishing a village council, identifying local problems, training local manpower, establishing a village health post, developing an appropriate technology, etc. (HC-L)

- 4302 Hirota, Y., Giri, J.N., Maskay, N.L., Baidya, B.R., Bajracharya, G.M.** *Tuberculosis control programme in Nepal (part 2): concrete strategy.* Kurume Medical Journal (Kurume, Japan), 24(2), 1977, 87-94. Engl. 9 refs.
See also entry 4252.

From October 1976-April 1977, a tuberculosis control project was undertaken by the Japanese Medical Cooperation Team in Syanja District, Western Region, Nepal. The project's aims were to administer BCG vaccination to all children aged less than 15 years, identify cases through direct smear examination of all symptomatic persons, and treat the afflicted. BCG vaccination and sputum collection were conducted on a house-to-

house basis. This document outlines the project's strategy, personnel, logistic support, and operational evaluation and reporting systems; discussion of the bases for its design is also included. (HC-L)

- 4303 Janis, I.L., Mann, L.** *Emergency decision making: a theoretical analysis of responses to disaster warnings.* Journal of Human Stress (Framingham, Mass.), 3(2), Jun 1977, 35-45, 47-48. Engl. 52 refs.

A theoretical model of emergency decision-making focuses on answers to basic questions evoked by signs of danger. Effective emergency decisions are made when a dominant vigilant coping pattern meets certain conditions. These include the awareness of serious risks of either taking or not taking protective action, moderate or high degree of hope that a better solution can be found, and a belief that there is sufficient time to search and deliberate before any serious threat will materialize. If these conditions are not present, defensive avoidance or hypervigilance will be dominant, resulting in poor decisions. (FM)

- 4304 Kasschau, P.L.** *Developing gerontology in a developing country: the case of Sao Paulo, Brazil.* International Journal of Aging and Human Development (Farmingdale, N.Y.), 8(4), 1977-1978, 325-337. Engl.

The efforts of a team of professionals to establish a gerontology centre in Sao Paulo is described, with emphasis on some of the problems of the emergent profession in Brazil: the uncertain labour market, recruiting, developing a native body of knowledge, visibility, legitimacy, financing, and competition with other government priorities. The author cites some of the benefits that might accrue to the field of gerontology by underwriting the development of similar centres in other developing countries. (Modified journal abstract.)

- 4305 Khalid bin Sahan, A.** *Some thoughts on health planning and development.* Medical Journal of Malaysia (Singapore), 32(1), Sep 1977, 1-5. Engl.

A simple planning methodology for decision-makers in developing countries is outlined. Proper planning requires 1) adequate data collection to identify health problems and their priority and 2) the determination of strategies to be used to solve them that take into account available technology and resources. One type of strategy is a broad frontal attack that tackles a number of basic or related problems at the same time; the other is through vertical programmes to solve health problems causing large-scale morbidity and mortality. The author also discusses integrating health services, standards of care, target-setting, training programmes, and evaluation. (DP-E)

- 4306 Khogali, M.** *Vertical integration for providing health services in developing countries.* Tropical Doctor (London), 8(3), Jul 1978, 157-159. Engl.

Plans for occupational health services in developing countries must stress a comprehensive approach and integrate such services into community health pro-

grammes. As occupational health services are often the only type of care available, they should form the basis of a total health care system to be developed over a period of time. Based at a medical centre providing preventive care for workers and their families, the medical personnel can then provide additional services as needed, ranging from primary environmental sanitation to nutrition, family planning, and hospitalization. (FM)

- 4307 Kleczkowski, B.M., Pibouleau, R. ed(s).** WHO, Geneva. *Approaches to planning and design of health care facilities in developing areas; volume 2*. Geneva, WHO, WHO Offset Publication No. 37, 1977. 145p. Engl. Refs.

See also entry 2964 (volume 5) for volume 1.

This document contains five papers on the planning and design of health care facilities in developing areas suffering from difficulties stemming from climatic conditions, pathology different from that of developed countries, and a lack of financial and manpower resources, external support, and adequate communications and transport networks. Topics covered include the regional planning of health facilities from the point of view of the health planner and the architect, the planning team and planning organization machinery, standards and technical requirements, provision for future expansion and remodeling throughout the planning process, and the function, planning, and architecture of health centres. (RMB)

- 4308 Ledogar, R.J.** *Food and survival in Lusaka's self-help townships*. Assignment Children (Geneva), 43, Jul-Sep 1978, 57-62. Engl.

The present activities and future plans of an urban agricultural project in Lusaka, funded by UNICEF, AFSC, and the Zambian government, are directed at achieving food self-sufficiency in the city. Building upon the tradition of urban farming already existing in the self-help townships of the area, the programme will provide a combination of seed capital, technical assistance, community organization, nutrition education, and agricultural training. It will promote kitchen gardens, rainy season cultivation of idle urban land, raising of small livestock, cooperative cultivation of small holdings in the urban periphery, and resettlement of urban residents on farms in the periphery. Begun as a pilot project in 1977, it will hopefully be self-supporting by 1980. (FM)

- 4309 Li Wang, V.** *Social goals, health policy and the dynamics of development as bases for health education*. International Union of Health Education (Geneva), 20(1), 1977, 13-18. Engl.

Ninth International Conference on Health Education, Ottawa, Canada, 29 Aug-3 Sep 1976.

Also published in French and German; for complete document see entry 4539.

Health policy is determined by the health and social goals of a society and progress results from changes in the environment and lifestyle of that society. These changes can be attained by community participation in health decisions, interdependence in development (agricultural development, transportation, housing, etc.), interdependence of health and other aspects of personal

and community life (nutrition, environmental pollution, smoking, etc.), education of professionals in the non-health sector (teachers, religious leaders, engineers, etc.), and helping people in the community become competent in activities that must be undertaken in order to attain their optimum state of health. (AF)

- 4310 McCarthy, J.R.** *Planning process for rural health care*. Hospital Forum (Los Angeles, Cal.), 19(3), 22 Aug 1976, 7-8, 22. Engl.

Planning a rural hospital may be more complex than planning an urban hospital, because the former is usually the community's sole source of health care. Community organizational ability and commitment are essential for success in identifying community needs and financing. Resources must be analyzed and implementation carefully planned. A process for constant evaluation and reexamination of options is also needed. (DP-E)

- 4311 Mein, P.** *Rural medical buildings in East Africa*. World Hospitals (Oxford, UK), 11(2-3), Jun 1975, 194-196. Engl.

After observing building activity in rural hospitals in Kenya and Tanzania, the author postulates a new role for the architect: that of facilitator and advisor to self-help groups. In keeping with this role, he recommends that more architectural information and a mobile architectural service be made available to doctors and administrators in the field and that medical and architectural personnel in developing countries take steps to formulate design and building standards for medical buildings in remote areas. (HC-L)

- 4312 Nair, S.S.** *Application of operations research approach in evolving a national tuberculosis programme*. Indian Journal of Public Health (Calcutta, India), 21(1), Jan-Mar 1977, 3-7. Engl. 17 refs. Matscience Conference on Mathematics in Medicine and Biology, Bangalore, India, Feb 1974.

The application of operational research methods to a national tuberculosis programme in India is described. The various steps involved in operations research are explained and an epidemiological model constructed to help plan a programme of prevention, case-finding, and treatment. A district tuberculosis programme was formulated and evaluated over a period of 1 year, after which improvements were made. It is suggested that operations research could be useful in developing other programmes in public health and social services. (FM)

- 4313 Nederlands Stichting voor Medische Ontwikkelingssamenwerking, Amsterdam.** *NESTIMO annual report 1977; Netherlands Foundation for Medical Development Cooperation*. Amsterdam, Nederlandse Stichting voor Medische Ontwikkelingssamenwerking, Bureau Medische Projectadviesing, 1977. 1v.(various pagings). Engl.

The 1st part of this 1977 annual report contains information on the development of NESTIMO's policy, including its premises, orientation, and objectives. The 2nd part is a survey of activities in 1977 concerning services that are rendered on request, such as the provision of

medical-technical advice on projects and the arrangement of consultancies. In 1977, NESTIMO advised on projects in Puerto Rico, Ethiopia, India, the Comoro Islands, Cameroon, Indonesia, Tanzania, Korea, Malawi, and other African countries. Appendices list the members of the board and abbreviations. (DP-E)

- 4314 Nichols, P.J.** *Rehabilitation services and responsibilities.* Asian Medical Journal (Tokyo), 20(3), Mar 1977, 23-35. Engl. 11 refs.

British Medical Equipment Exhibition and Technical Seminar, Tokyo, Japan, 7-11 Feb 1977.

Rehabilitation includes many physical, social, and organizational aspects of the after-care of patients. Confusion exists between the provision of services and the responsibility for supervising rehabilitation and between hospital and community services and within various professional groups concerned with the different aspects, resulting in a tendency, usually harmful, to segregate rehabilitation from initial clinical responsibility. It is wise to classify rehabilitation by clinical condition and on the basis of temporary or chronic disability and treat the patient accordingly. The community and family should be encouraged to take a supportive role with the disabled. (DP-E)

- 4315 Pan American Health Organization, Washington, D.C.** *Extension of health service coverage based on the strategies of primary care and community participation: summary of the situation in the region of the Americas.* Washington, D.C., Pan American Health Organization, Official Document No. 156, 1978. 66p. Engl.

This publication summarizes the reports presented by 28 countries at the 4th Special Meeting of Ministers of Health of the Americas held in 1977. Health care coverage, mode of delivery, strategy for extending or strengthening health services, and areas for fruitful cooperation are the main ideas covered in the reports. An overview of these concepts is given in an introductory chapter. (DP-E)

- 4316 Parker, A.** *Health technology and primary health care.* Social Science and Medicine (Oxford, UK), 12(1C/2C), Jun 1978, 29-41. Engl. 14 refs.

Primary care, the most cost-effective type of health service for developing countries, must in all cases be directed toward major health and disease problems, be acceptable and compatible with the social and cultural characteristics of the recipients, be continuously available to the community, be as effective and safe as available resources will allow, and contribute to personal and community development. All available information on appropriate health technology must be collected and distributed so that health planners can choose the best strategy for each area. The author discusses the concept of and means of evaluating appropriate health technology in this context. (DP-E)

- 4317 Quelch, J.A.** *Role of nutrition information in national nutrition policy.* Nutrition Reviews (New York), 35(11), Nov 1977, 289-293. Engl.

Nutrition education is an important element of overall national nutrition policy. The development of a nutrition information delivery strategy represents a special challenge because of the multiplicity of information vehicles available to the policy-maker and because much of the information available to the public is outside government control. Government agencies should be coordinated, duplication of efforts reduced, and resource utilization maximized. Comparative studies of the impact of alternative programmes are necessary if resources are to be effectively allocated. (Modified journal abstract.)

- 4318 Quesada, M.M.** *Underdevelopment and its challenge to nursing.* ANPHI Papers (Quezon City, Philippines), 12(4), Sep-Dec 1977, 1-2. Engl.

More action-oriented nurses and other health professionals are needed in poor, underdeveloped communities to effect social change and help the people develop the ability to attend to their own health. Suggested activities include health programmes that take into account the felt and expressed needs of the people, intensification of health education efforts to facilitate organized and sustained participation, modification of the health worker's value-orientation through a relevant medical and nursing curriculum, utilization of local materials, and participation of health professionals in an organization aimed at the improvement of living and working conditions for health workers. (AF)

- 4319 Rao, K.G.** *Guidelines for developing alternative models for delivery of health care.* In Alternative Approaches to Health Care, New Delhi, Indian Council of Medical Research, 1976, 191-200. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

Previous Indian attempts to develop alternative health care delivery systems are examined and guidelines for future planning are presented. According to these guidelines, any alternative system should emphasize: primary care for at-risk sections of the population; the principle that health planning is an integral part of economic development planning; the need to make use of all available persons in the community, including traditional practitioners and midwives, teachers, etc.; a combination of traditional and Western medicines; a service-cum-research approach; cost-effectiveness; appropriate modification in health manpower training; etc. Four basic approaches for alternative strategies are suggested. (RMB)

- 4320 Romeder, J.M., McWhinnie, J.R.** *Potential years of life lost between ages 1 and 70: an indicator of premature mortality for health planning.* International Journal of Epidemiology (Oxford, UK), 6(2), 1977, 124-151. Engl. 28 refs.

The indicator of potential years of life lost between 1 and 70 years (PYLL) is proposed with the primary objective of ranking major causes of premature mortality. This proposal is based on a review of existing mortality indica-

tors and indices and of the history of the concept of potential years of life lost. The method of calculation along with the corresponding rate and the age-adjusted rate are discussed. This indicator fits well into the category of social indicators and can help health planners define priorities for the prevention of premature deaths. Epidemiological studies could also make use of this indicator of premature mortality. (Modified journal abstract.)

- 4321 Roy, D.J.** *Santé et la naissance d'un ordre mondial. (Health care in an emerging world order).* Union Médicale du Canada (Montreal, Que.), 106(4), Apr 1977, 426-433. Fren.

Modern concepts of health and medicine must change to keep pace with evolving world order patterns and structure. The author summarizes the main findings of various study groups such as the Club of Rome and Princeton's Centre for International Studies, who are attempting to define a new world order based on the interdependence of nations. Future health policy will also have to take into account the interrelationship of all sciences and develop a systems-oriented, multidisciplinary approach to health care. (FM)

- 4322 Saenz Jiménez, L.** *Planning health services for emergency situations.* Bulletin of the Pan American Health Organization (Washington, D.C.), 11(1), 1977, 31-40. Engl.

A health plan for disaster situations must cover a wide range of complex activities, anticipate any possible problems, and clearly define goals. A detailed description of the existing health organization and modifications needed to meet disaster should be part of the plan. Also necessary is the coordination of national, regional, and local plans. Besides providing emergency medical care, the health sector should be prepared to evacuate and transfer victims, execute basic environmental sanitation measures, and institute mental health programmes. (DP-E)

- 4323 Said, H.M.** *Health education and preventive medicine in the community.* Karachi, Hamdard National Foundation, n.d. 16p. Engl.
Sixth International Congress of Rural Medicine, Cambridge, UK, 21-27 Sep 1975.

The objectives of health education in Pakistan and other developing countries should be to: increase the outreach of health facilities; improve the general health of the community, environmental health, and the nutritional status of the malnourished; provide disease control and immunization; and develop a data collection service. In this conference paper, the author discusses the training of health educators and auxiliaries, methods and media, participation of the rural community, health films and literature, mobile health units, the annual Pakistan health of the nation conference and the Hamdard National Foundation, preventive medicine, traditional medicine, and the inclusion of rural health in the medical curriculum. (DP-E)

- 4324 Sartorius, N.** *WHO's new mental health programme.* WHO Chronicle (Geneva), 32(2), Feb 1978, 60-62. Engl.

Also published in French, Russian, and Spanish.
In response to requests from many countries, WHO has developed a mental health programme to be carried out over the next 5 years. Its main objectives are to: prevent or reduce psychiatric, neurological, and psychosocial problems, including those related to alcoholism and drug dependence; increase the effectiveness of the general health services through appropriate utilization of mental health skills and knowledge; and develop strategies for intervention based on an increased awareness of the mental health aspects of social action and change. This programme is described in detail. (Modified journal abstract.)

- 4325 Sohler, R., Gaudin, O.G.** *Rôle du laboratoire de virologie dans un pays en développement. (Role of the virus laboratory in a developing country).* Bulletin of the World Health Organization (Geneva), 56(1), 1978, 39-51. Fren. Refs.

Also published in English and Spanish.
The authors feel that the important contributions to disease control programmes that a virus research laboratory can make outweigh the expense involved in setting one up, maintaining it, and training staff. Its importance in carrying out epidemiological surveys for poliomyelitis, measles, and influenza is emphasized, as well as its role in identifying new viruses. This article describes the equipment needed to establish such a laboratory and stresses the importance of proper maintenance. Training of staff is also covered, along with the basic techniques of virus identification suitable for a new laboratory in a developing country. (FM)

- 4326 Stensland, P.** *International commitment to action on health. Convergence* (Fribourg, Switzerland), 11(3-4), 1978, 64-71. Engl.

A brief report on the UN-sponsored conference at Alma Ata describes the major goals of the participants and their final declaration on primary health care. Stressing integration and multi-agency cooperation, the conference was attended by governmental and non-governmental organizations from over 140 countries. Trends in health care were seen to be following two major alternatives. One views primary care as part of a national system with hospital-centred services dominated by doctors. The other emphasizes local control with more participation by community health workers and paraprofessionals. The basic priorities of national and international health planning are also outlined. (FM)

- 4327 Stevens, C.M.** *Health and economic development: longer-run view.* Social Science and Medicine (Oxford, UK), 11, Dec 1977, 809-817. Engl. 25 refs.

Although recognition has been given to the fact that improved health status can make an important contribution to economic development in developing countries, not enough resources have been applied to the study of long-term effects of health on development. The author

distinguishes between short-term productivity gains and the longer-term situation, taking into account organizational and technical change induced by improved health. The relationship between health and technological change in both the agricultural and non-agricultural sectors is studied. The problem of defining and measuring health status is discussed and evaluation programmes are suggested. (FM)

- 4328 Stokes, J.** *Preventive strategies, research and evaluation in primary care.* Fogarty International Centre Series on Teaching Preventive Medicine (Bethesda, Md.), 5, 1976, 73-78. Engl. 16 refs.

On the premises that preventive medicine is more difficult to practice than curative care and requires strong institutional support, that the preventive attitude should pervade every aspect of clinical medicine, and that preventive medicine and primary care should be closely related, the author examines preventive strategies relating to the environment and the patient (i.e., health education, screening, immunization, etc.). In order to encourage the melding of family and preventive medicine, he advocates research into the clinical method and improved clinical trials and the development of better health information systems. (RMB)

- 4329 Taylor, C.N.** *Primary health care, policy makers and health education: some challenging goals.* International Union of Health Education (Geneva), 20(1), 1977, 48-50. Engl.

Ninth International Conference on Health Education, Ottawa, Canada, 29 Aug-3 Sep 1976.

Also published in French and German; for complete document see entry 4539.

Policy makers should define primary health care as simple, effective, and affordable health care that can be sustained through community participation and health education. The health educator's role in the planning, development, and implementation of health education programmes is dependent on the people and their participation in health activities that are basic to health education. Indigenous practitioners can be of inestimable aid in effecting the desired changes. An important challenge for the health educator is to help bridge the gap between policy makers and the people by education of politicians and health administrators. (AF)

- 4330 Todd, M.C., Snyder, L.J.** *Priorities for increasing availability of health services in rural areas.* Journal of the American Medical Association (Chicago, Ill.), 222(10), 4 Dec 1972, 1284-1285. Engl.

Activities to be given priority by the US Council on Health Manpower and the Council on Rural Health of the American Medical Association are reported as part of their efforts to alleviate the problems of medically deprived rural areas. These activities include: development of alternative systems for health care delivery in deprived rural areas, with emphasis on transportation, technology, and communication; development of criteria for identifying medical or health service areas and for determining manpower and facility needs; education of

rural community leaders in planning for health services; increased technical assistance to physicians forming medical groups in rural areas; etc. (Modified journal abstract.)

- 4331 Van Etten, G.** *Primary health care in developing countries.* Social Science and Medicine (Oxford, UK), 12(5A), Sep 1978, 425-427. Engl.
Fifth International Conference on Social Sciences and Medicine, Nairobi, Kenya, 7-11 Aug 1977.

This paper contains a resume of the conference proceedings plus individual summaries of the participants' conclusions and recommendations regarding traditional medicine and primary health care (PHC), prerequisites for an adequately-functioning PHC system, the economic aspects of PHC in developing countries, and research priorities in PHC in developing countries. The political aspect of PHC surfaced frequently through the sessions. (HC-L)

- 4332 Venezuela, Ministerio de Sanidad y Asistencia Social, Oficina de Publicaciones, Biblioteca y Archivo.** *Quinto Congreso Venezolano de Salud Pública: XL Aniversario del Ministerio de Sanidad y Asistencia Social, 9-16 de octubre de 1976.* (Fifth Venezuelan Public Health Congress: 40th anniversary of the Ministry of Health and Social Assistance, 9-16 Oct 1976). Revista Venezolana de Sanidad y Asistencia Social (Caracas), 42(1-2), Mar-Jun 1977, 79, 81, 83, 85-373. Span. Refs. Quinto Congreso Venezolana de Salud Pública, Caracas, Venezuela, 9-16 Oct 1976.

The 1st part of this collection of conference papers deals with the process of formulating, adopting, and establishing the appropriate mechanisms for implementing a health policy. The 2nd part discusses programming efforts aimed at: improving the health of individuals, groups, or the collectivity (e.g., maternal and child health care); the control of specific diseases, conditions, and accidents; environmental health; and the structure and operation of the health services. The 3rd, a synthesis of the information contained in the 1st 2 parts, presents a diagnosis of the health situation, indicates priority needs, and offers alternative ways of mobilizing the country's resources. (HC-L)

- 4333 Venezuela, Ministerio de Sanidad y Asistencia Social.** *Proyecto de programa de actividades de atención materno-infantil del Hospital Universitario "Los Andes," Mérida.* (Activities programme of the maternal child health project of Los Andes University Hospital, Merida). Caracas, Ministerio de Sanidad y Asistencial Social, Dirección de Salud Pública, Secretaría de Servicios Médicos Asistenciales, Cuadernos de Atención Médica y de Hospitales, Cuaderno No. 6, Oct 1971. 28p. Span.

Los Andes University Hospital, Merida, Venezuela, has initiated a project for improving maternal and child health within its area of influence. The project is based on the protection of mother and child as a biopsychological unit and, as such, demands cooperation on the

part of various hospital departments (pediatrics, obstetrics, preventive medicine, etc.), peripheral health units, and social services. This document defines the project's functions and presents tabulated projections of the worker-hours required to fulfil them if the project is to obtain 90% and 70% coverage of the target population, respectively. (HC-L)

- 4334 Vidal, C.A.** *Appropriate health technology.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(3), 1978, 201-210. Engl. 10 refs.

The application of science and technology to development in Latin America has been hampered by cultural differences and lack of trained personnel and economic resources. However, environmental and social factors and group and individual behaviour patterns have a far greater impact on health than medical technologies. Therefore, the critical problem for any society is how to develop the cultural values and social and political relations that will make good health available for all. This calls for a new approach to technology that includes the reallocation of resources to meet real needs, the integration of health services with other development services, a strategy of decentralization that encourages community participation, etc. (DP-E)

- 4335 White, K.L., Anderson, D.O., Kalimo, E., Kleczkowski, B.M., Purola, T.** *Health services: concepts and information for national planning and management.* Geneva, WHO, WHO Public Health Papers No.67, 1977. 117p. Engl.
Also published in French.

Based on the findings of the WHO International Collaborative Study of Medical Care Utilization, this book focuses on health services management and health systems planning. Following an introductory chapter, the problems of information in health services administration are discussed. A 3rd chapter outlines the major aspects of the International Collaborative Study. Chapter 4 describes approaches to assessing health care systems and utilization patterns. Chapter 5 explores resource allocation, emphasizing these factors: balancing needs, resources, and use; substituting resources; and selecting target groups most in need. Chapter 6 describes the role of information systems and chapter 7 summarizes the basic precepts of planning that emerged from the study. (FM)

- 4336 WHO, Geneva.** *Focus on high-risk mothers and children in South-East Asia.* WHO Chronicle (Geneva), 32(5), May 1978, 200-201. Engl.

Also published in French, Russian, and Spanish. Because of the almost universal lack of a systematic approach to health services planning and operation, WHO has developed and promoted a number of managerial tools for making optimal use of existing resources. One such tool is the "risk approach," which is especially suited to maternal child health and family planning. This permits the development of a flexible and locally appropriate strategy based on the measurement of community and individual risk. In 1977, seven countries in WHO's

Southeast Asian region met to make recommendations on the local application of this strategy, including the concept and definition of high-risk groups, screening techniques, etc. (DP-E)

- 4337 WHO, Geneva.** *Health education of children and young people.* International Journal of Health Education (Geneva), 21(3), 1978, 205-207. Engl. Working Group on Health Education of Children and Young People, Dublin, Ireland, 23-26 May 1978.

Working papers presented at the meetings of the WHO working group on health education for children are reviewed. One stressed the integration of health education and other child health services. Another suggested that the training of health educators needed to be reorganized to reflect the needs of children. Health education for children aged 0-5 years should focus on self-identification and growth of personality. For children aged 6-16 years, health education services increase in importance as parents' roles decrease. The various agencies should coordinate their services and training of educators for this age group should be improved. The counseling needs and wide range of services required for the group aged 17-25 years are also considered. (FM)

- 4338 WHO, Geneva. UNICEF, New York.** *WHO/UNICEF joint study on alternative approaches to meeting basic health needs of populations in developing countries.* New York, UNESCO, 30 Dec 1974. 122p. Engl.

The present state of the problem of meeting basic health needs of populations in developing countries is examined in terms of world poverty, underprivileged populations, major health consequences, and major health service problems, including lack of coherent policies, insufficient resources, structural inadequacies, and technical weaknesses. Case studies of alternative systems in Bangladesh, the People's Republic of China, Cuba, Tanzania, Venezuela, Yugoslavia, India, Niger, and Nigeria are discussed in the text and more completely described in annexes. Conclusions and recommendations are presented. (DP-E)

- 4339 Wright, C.J.** *Health care in Africa today: a question of priorities.* n.p., 30 Mar 1978. 9p. Engl. Unpublished document.

The author discusses the problems faced by health planners in developing countries when they attempt to make optimal use of available resources. The difficulties are compounded by the fact that such a variety of health services are now available and, in the same country, pockets of sophisticated technology exist side by side with totally neglected areas. The author recommends avoiding highly specialized services in favour of general medical care and services that can be performed by auxiliaries and traditional practitioners with special training. (DP-E)

II.4 Geographic Distribution of Health Services

See also: 4251, 4268, 4349, 4504, 4587.

- 4340 Kay, B.J.** *Delivery of health care services in Cuba.* Journal of the Medical Association of Georgia (Atlanta, Ga.), 68(2, Ga.), Feb 1979, 99-100. Engl.

On a visit to Cuba in 1978, the author observed the improvements in the island's health care delivery system since 1959, when there was a high prevalence of infectious diseases and malnutrition. Health care services are free and the polyclinic in every town serves approximately 25 000 persons. The services include curative treatment, environmental health (sanitation), community services (innoculations and screening), and social services. The physician:population ratio is 1:1 000 and regional hospitals serve 250 000; since 1959, rural areas have experienced a 50% increase in available hospital beds. Infant mortality has decreased from 60:1 000 live births in 1953 to 25:1 000 at present and malaria has been eliminated. (AF)

- 4341 Madison, D.L., Bernstein, J.D.** *Rural health care and the rural hospital.* In Bryant, J.H., Ginsberg, A.S., Goldsmith, S.B., Olendzki, M.C., Piore, N., eds., Community Hospitals and Primary Care, Cambridge, Mass., Ballinger, 1976, 51-75. Engl.

For complete document see entry 4288.

The authors review the current status of health care problems common to rural areas and survey some attempts by government and private interests to alleviate them by improving public health services, providing primary care to special groups (i.e., migrants, Indians, slum dwellers), attracting physicians and other health workers to rural areas, and constructing new facilities and reorganizing services. Rural hospitals are discussed and factors that have affected rural ambulatory care, such as lack of rural physicians, technological advances, increased specialization, and improved access to urban areas, are examined. Patterns of ambulatory care and future prospects are considered. (RMB)

II.5 Financial Aspects

See also: 4282, 4425, 4658.

- 4342 Agarwal, A.** *UN takes a stand on drugs.* New Scientist (London), 80(1128), 9 Nov 1978, 442-443. Engl.

Various UN agencies have expressed concern over the high cost and inadequacy of pharmaceutical supplies in the Third World. The UNDP, with technical support from WHO, UNCTAD, and UNIDO, is currently funding a project whose aims are to help Third World countries formulate a coherent drug policy and identify specific areas for cooperation within the pharmaceuticals sector. On a national basis, the UN is encouraging the development of basic drug lists, bans on brand names, bulk purchasing, small-scale drug industries, and the use

of traditional medicines. This paper discusses the experience of Sri Lanka in implementing some of these measures and the reaction of the multinational drug companies to this challenge to their supremacy. (HC-L)

- 4343 Bermann, S., Escudero, J.C.** *Health in Argentina under the military junta.* International Journal of Health Services (Westport, Conn.), 8(3), 1978, 531-540. Engl. 17 refs.

The socioeconomic policies of Argentina's military junta, in power since March 1976, have led to the impoverishment of most of the population. In the health sector, public facilities are being transferred to the private sector and the public must now pay for services. As a necessary counterpart to these unpopular measures, a regime of terror has been waged against members of the health team, both those politically active and those considered potentially subversive, particularly psychiatrists and workers in community health. The possibility of use of the "Argentina model" in other capitalist countries in crisis is discussed. (Modified journal abstract.)

- 4344 Bygbjerg, I.C.** *Use of drugs in developing countries.* Tropical Doctor (London), 8(3), Jul 1978, 174-176. Engl.

Some of the problems associated with the use of drugs in developing countries are discussed. The need to procure cheap, relevant drugs rather than expensively packaged, unnecessary products is stressed. Suggestions are given concerning the storage and distribution of drugs. Good prescription habits that aim at reducing practices such as the excessive prescribing of antibiotics and intravenous infusions are also discussed. The high drug consumption rate of medical personnel and their families also comes under attack. Recommendations include refresher courses on treatment of common diseases, yearly evaluations of hospital prescriptions, and substitution of simple products for more potent drugs to satisfy the expectations of patients. (FM)

- 4345 Gobin, M.** *Role of social security in the development of the Caribbean territories.* International Social Security Review (Geneva), 30(1), 1977, 7-20. Engl.

This article traces the development of social insurance and provident fund schemes in the Caribbean. The rate of progress and change was varied from country to country in accordance with political and socioeconomic development. The Caribbean states included in the survey are Antigua, Barbados, Bahamas, Dominica, Guyana, Jamaica, Montserrat, Netherlands Antilles, St. Kitts, Nevis and Anguilla, St. Lucia, St. Vincent, and Trinidad and Tobago. Statistical data are included. (Modified journal abstract.)

- 4346 Hanlon, J.** *Are 300 drugs enough?* New Scientist (London), 79(1119), 7 Sep 1978, 708-710. Engl.

Mozambique is pioneering a new drug policy based on limiting the number of subsidized prescription drugs to fewer than 400 generically-named items, accepting bids on bulk orders of drugs from suppliers throughout the

world, and encouraging doctors to prescribe the least expensive drug and form of drug that will effectively treat a given condition. This paper briefly reviews the methods, accomplishments, problems, and future directions associated with the implementation of the new policy. (HC-L)

- 4347 Indonesia, Department of Health. Appendix IV: rural community health development in the Regency of Karanganyar.** In *Primary Health Care: Some Experiences from Indonesia*, Jakarta, Department of Health, May 1978, Appendix IV, 1-8. Engl.
Unpublished document; see also entries 4066 (volume 6) and 4621.

The 2nd 5-year development plan for the regency of Karanganyar, Indonesia, concentrated on widening the coverage of health care and increasing public participation and self-care. In 1975, a pilot project was set up establishing a rural health insurance fund. Under the guidance of government and social agency officials, the members of five villages took part in the project by recruiting and training village health promoters, managing funds, and providing basic health care and counseling. To ensure the integration of the project with other aspects of community development, the health fund is operated within the Village Social Institute as part of the family welfare promotion programme. (FM)

- 4348 Mach, E.P. Financing of health systems in developing countries.** *Social Science and Medicine* (Oxford, UK), 12(1C/2C), Jun 1978, 7-11. Engl. 16 refs.

A developing country must plan the whole of its health services, public and private, and estimate resources available and total expenditures required. Lack of funds, unfair distribution of available funds, insufficient coordination among sources of financing, and inadequate attention to cost and efficiency are some of the major problems in this area. The author discusses the planning process that should be carried out in order to maximize resources. (DP-E)

- 4349 Onuoha, E.J. Health care problems in developing countries.** *International Nursing Review* (Geneva), 25(3), May-Jun 1978, 78-81. Engl. 8 refs.
This article discusses briefly what the author considers to be the most common health care problems in developing countries: information and data collection problems, inadequate systems of communication, lack of skilled labour, organization problems, poor distribution and utilization of available health resources, and insufficient funds for capital investment and problems of cost analysis. Countries that have developed viable health care systems despite these problems, notably Cuba, Venezuela, and the People's Republic of China, are mentioned. (RMB)

- 4350 Revista Centroamericana de Ciencias de la Salud, San José. Informe final del III Seminario del Programa Centroamericano de Ciencias de la Salud: el costo de la salud en Centroamérica.**

(*Final report of the Third Seminar of the Central American Health Sciences Programme: the cost of health in Central America*). *Revista Centroamericana de Ciencias de la Salud* (San José), 2(4), May-Jun 1976, 73-95. Span.

Tercer Seminario del Programa Centroamericano de Ciencias de la Salud: el Costo de la Salud en Centroamérica, Santa Barbara de Heredia, Costa Rica, 19-24 Apr 1976.

Papers presented at this Central American seminar focused on four themes: the health situation, the economic and social cost of health, drug expenditure (the multinational drug companies and their alternatives), and the responsibilities of the health team and the community in solving problems related to health expenditure. The issue of community participation in health care figures strongly in the seminar's recommendations. (HC-L)

- 4351 Sournia, J.C. Remarques sur l'évolution de la protection sociale et sanitaire dans les pays en voie de développement. (Comments on the evolution of social and health protection in developing countries).** *Vie Médicale au Canada Français* (Quebec City, Que.), 6(1), Jan 1977, 29-30, 32-34, 38-39. Fren.

The development of social security benefits in developing countries is discussed. Brief descriptions are given of achievements in the areas of occupational health, unemployment, health insurance, family allowances, retirement, and emigration. Administration, financing, and planning of social welfare programmes are examined. Inequalities and regional disparities still exist, but it is felt that any social welfare measures to protect the individual are worthwhile. (FM)

II.6 Cultural Aspects

See also: 4331, 4537, 4541, 4572, 4595, 4614.

- 4352 Agarwal, A. New respectability for "witch doctors."** *New Scientist* (London), 79(1115), 10 Aug 1978, 413-415. Engl.

It has become clear that high-cost, Western-style health services cannot meet the needs of the Third World and efforts are being made to utilize the resources that already exist in the neglected rural community. One such resource is the traditional healer. A study of an Indian village with both traditional and modern health care facilities indicated that traditional healers are important factors in a community's health and that they are especially adept at treating mental illnesses. Methods of integrating these healers into the health care system are considered. (DP-E)

- 4353 Bibeau, G., Corin, E., Buganza, M.H., Mandela, M., Ahluwalia, R. International Development Research Centre, Ottawa. Médecine traditionnelle au Zaïre. (Traditional medicine in Zaïre).** Ottawa, International Development Research Centre, 1979. 63p. Fren.

Also published in English.

In describing the main features of traditional medicine in

Zaire, the authors emphasize its possible contributions to modern medical care. The sociocultural background of both the traditional healers and their patients is given, followed by a detailed description of their system. Physiological and anatomical concepts and diagnostic and treatment methods are examined. The legal status of folk healers and their attitudes to modern society are also discussed. A 2nd section recommends closer collaboration between modern and traditional health systems and suggests appropriate changes in the organizational structure of health administration to facilitate this. (FM)

- 4354 Bouramoué, C.** *Intégration de la médecine traditionnelle africaine à la médecine moderne. (Integration of traditional African medicine with modern medicine).* Médecine Moderne et Médecine Traditionnelle (Paris), 36, Jul 1977, 4-5, 13. Fren.

This paper points out a number of similarities between the approaches used in traditional African and modern Western medicine and describes instances in which the two can be considered complementary. It suggests the desirability of integrating traditional medicine with modern medicine and recommends that this be accomplished by compiling a list of all *bona fide* traditional healers, training the healers in basic literacy and medical and hygienic concepts, and organizing them into an association for the regulation of their craft and the protection of their clients. (HC-L)

- 4355 Bruhn, J.G., Fuentes, R.G.** *Cultural factors affecting utilization of services by Mexican Americans.* Psychiatric Annals (New York), 7(12), Dec 1977, 20-29. Engl. 20 refs.

Recognizing the cultural basis for the diagnosis and treatment of disease among Mexican-Americans in the USA should be an essential part of the health care system in certain geographical areas. The larger Anglo (North American) system should be flexible enough to accommodate patients with different beliefs and needs and Anglo medical personnel should be made aware of these differences. The two systems of health care should complement each other, especially since the Mexican-American system is designed to meet psychological, social, and spiritual needs and the US health care system is designed primarily to treat physical ailments. (Modified journal abstract.)

- 4356 Chien-Chung, C.** *Chinese plant medicine.* World Health (Geneva), Jul 1978, 20-23. Engl. Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

Traditional medicine and pharmacology have played an important role in health care in ancient times as well as in recent days in the People's Republic of China. Chinese medical personnel, both physicians and barefoot doctors, are trained to make full use of herbal medicine and combine it with modern techniques where applicable. Traditional herbs, often planted at the roadside or along the edge of cultivated fields, have proven to be safe and effective as well as inexpensive and accessible. (DP-E)

- 4357 Collomb, H.** *Programmes d'assistance psychiatrique dans les pays en voie de développement. (Programmes of psychiatric assistance in developing countries).* Social Science and Medicine (Oxford, UK), 12(5A), Sep 1978, 335-339. Fren. Fifth International Conference on Social Sciences and Medicine, Nairobi, Kenya, 7-11 Aug 1977.

One of the legacies of African colonization is the occidental approach to mental illness: isolation of the patient in an asylum from which escape or death is the only release. In Senegal, this costly and counter-productive approach is gradually being replaced by one inspired by the methods of traditional African healers. This new treatment method calls for the integration of hospital and social life, the participation of the family in therapy, and the reduction of inpatient in favour of outpatient care. Other concepts being explored are the psychiatric village and the mental health dispensary. (HC-L)

- 4358 Conco, W.Z.** *Traditional doctors as part of the health team: towards a realistic, positive approach to the health manpower problem in Africa.* Medical Journal of Zambia (Lusaka), 12(1), Jan-Feb 1978, 7-12. Engl. 28 refs.

Western health planners have tended to ignore the traditional African healer, failing to recognize that he could be the key component to the delivery of health services in his community. In order to make the traditional healer part of the health team, it must be determined why he is trusted and accepted and what community needs he satisfies. Without an understanding of the traditional healer and his patients, any attempt to improve health care for Africans will fail. (DP-E)

- 4359 Foster, G.M.** *Medical anthropology and international health planning.* Social Science and Medicine (Oxford, UK), 11(10), 1977, 527-534. Engl. 25 refs.

Greater knowledge of social and cultural factors in developing countries is essential for effective planning of health services. Reasons for resisting change and not accepting modern medicine must be thoroughly understood. Often they have an economic as well as a social basis and, if the benefits are clearly presented, change will be more readily accepted. Government bureaucracies are another barrier to change, as are the attitudes of medical personnel who are unwilling to adapt to the needs of developing countries. Traditional healers have an important role to play in health services and should be encouraged by government and health agencies. (FM)

- 4360 Holdsworth, D.** *Traditional medicinal plants used in the treatment of gastric ailments.* Papua New Guinea Medical Journal (Port Moresby), 21(2), Jun 1978, 175-183. Engl. Refs.

This paper summarizes information now available on Papua New Guinean plants used to treat gastric ailments, especially diarrhea and dysentery. The author believes that this information will be of interest to pharmacologists and phytochemists throughout the world, since few of the plants have been screened or tested. Further pharmacological investigations into the relative

effectiveness and the photochemistry of these plants are considered necessary. (DP-E)

- 4361 Jones, A.D.** *Medical practice and tribal communities.* CIBA Foundation Symposium (London), 49, 1977, 243-255. Engl. 8 refs.

This article discusses recent studies of societies in which medical procedures involving injections and other modern techniques are carried out by unqualified practitioners. These practitioners are examined from the point of view of the sociology of health care. Their relationship with modern practitioners is considered and traditional and modern practices are compared. These ideas are further elaborated in a discussion group and a transcript of the discussion is appended. (DP-E)

- 4362 Kandiah, N., Mohd Riji, H., Palan, V.T.** *Current attitudes of the society towards leprosy and the changing role of the National Leprosy Control Centre, Sunga Buloh, Malaysia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(1), Mar 1978, 103-111. Engl.

This Malaysian study examined attitudes about leprosy and the National Leprosy Control Centre (NLCC). The results indicated that prejudice toward and fear of leprosy tended to depend on ethnic origin and age and that acceptance of leprosy patients into the community was low. Less than half of the population was aware that the NLCC treated illnesses other than leprosy and many of those people were reluctant to go to the Centre for fear of catching leprosy. Public education and transport facilities are two aspects of leprosy control that must be improved. Statistical data are included. (DP-E)

- 4363 Kochar, V., Marwah, S.M., Udupa, K.N.** *Strengthening the folk health system: proposed link between the health needs of the rural population and limitations of the formal health system in remote rural areas.* In *Alternative Approaches to Health Care*, New Delhi, Indian Council of Medical Research, 1976, 201-217. Engl. 58 refs. Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

Three types of health resources exist in rural India: the formal health system, the informal system, and the folk system. These systems are examined in terms of utilization, practitioners, patient satisfaction, and economic support and the strengths and weaknesses of traditional medicine are discussed. The authors present a proposal for strengthening the traditional system and incorporating it into the formal health system on the grounds that it provides: a low-cost, pre-existing pool of manpower already supported by the community; a needed link with the local community and culture; a ready-made peripheral delivery system; an opportunity to improve the medical standards of traditional practitioners; etc. (RMB)

- 4364 McHenry, M.M.** *Medicine in South India.* Western Journal of Medicine (San Francisco, Cal.), 129(4), Oct 1978, 349-357. Engl.

A US physician presents an overview of Indian medical

history and practices, which are greatly influenced by the country's financial difficulties and overpopulation. Most patients are still treated by traditional practitioners, who are often more familiar with local disease patterns than Western-trained physicians. The author suggests that both Western and traditional medicine have much to offer each other. (DP-E)

- 4365 Meade, M.S.** *Community health and changing hazards in a voluntary agricultural resettlement.* Social Science and Medicine (Oxford, UK), 12, 1978, 95-102. Engl. 10 refs.

Ecological, social, and economic conditions that influence human health in an agricultural land scheme and voluntary resettlement programme in peninsular Malaysia have been greatly simplified. Specific hazards such as those posed by scrub typhus, malaria, vehicular accidents, and lonely alienation have been intensified, whereas others of enteric infection and population stress have been reduced. Exploitation by higher level national and international systems is a critical factor in the scheme's success. Stresses upon the selected populations have been largely within its ability to cope and have promoted adaptability and hence health. (Modified journal abstract.)

- 4366 Meigs, A.S.** *Papuan perspective on pollution.* Man (London), 13(2), 1978, 304-318. Engl. 11 refs.

This article discusses the pollution theory of the Hua, a Papua New Guinea highland people, and examines the concept of pollution in some ethnographic literature of Papua New Guinea and South Asia as well as more general theories concerning this subject. Since Hua concepts cannot be accounted for by general theories, the author proposes a new theory of pollution that accounts for pollution ideas in Hua society and possibly in Western societies as well. (Modified journal abstract.)

- 4367 Meyer, G.G.** *Professional in the Chicano community.* Psychiatric Annals (New York) 7(12), Dec 1977, 9-19. Engl.

Following a general description of the sociocultural characteristics of Mexican-Americans in the USA, the author outlines some of the problems faced by psychiatrists working with this group. Adaptability and flexibility are essential, along with a willingness to understand the culture and cooperate with other members of the community. Emphasis is placed on working with the local *curandero*, or traditional folk-healer, in a reciprocal referral system. Some of the administrative problems arising from the presence of many different agencies are also discussed. (FM)

- 4368 Mitchell, I.S., Cawte, J.E.** *Aboriginal family voluntary resettlement scheme: an approach to Aboriginal adaptation.* Australian and New Zealand Journal of Psychiatry (Melbourne), 11(1), 1977, 29-35. Engl. Refs.

An evaluation of the Aboriginal resettlement schemes at Bourke and Newcastle, Australia, defines the main principles of the project with particular reference to the

physical and mental health aspects of the migrants. The data indicate that migration of adults probably will lead to less hospitalization and to a reduction of acute conditions but will not alter the migrants' own conceptions of their health. On the other hand, their mental health will improve considerably, probably more because of the greatly improved physical and social environment following resettlement than because of anything to do with the migration process itself. (Modified journal abstract.)

- 4369 Morinis, E.A.** *Two pathways in understanding disease: traditional and scientific.* WHO Chronicle (Geneva), 32(2), Feb 1978, 57-59. Engl.

Also published in French, Russian, and Spanish.

The therapeutic strategies utilized by followers of traditional medical systems are based on genuine beliefs and expectations relating to the body-mind-spirit complex. People will use logic, but not necessarily scientific and empirical logic, in assessing the suitability of various available therapies to satisfy their bodily and other needs. Failure of health planners to consider the role of indigenous medical practice may undermine the operation of any programme, because of its rejection by the people, despite its efficiency and scientific validity. (Journal abstract.)

- 4370 New, P.K.** *Traditional and modern health care: an appraisal of complementarity.* International Social Science Journal (Paris), 29(3), 1977, 483-495. Engl. Refs.

The possible integration of Western and traditional medicine has been receiving increasing attention. While many consumers seek remedies in traditional and folk medicine, they are usually forced to pay for these services, while those seeking relief from physician-dominated health care systems are often aided by state health plans. It is desirable to determine if a pluralistic mode of health delivery is advantageous, but this is impossible as long as the state refuses to sanction any form of traditional or folk medicine. It is hoped that some answers can be obtained from the experience of the People's Republic of China, which seems to be committed to integrating traditional and Western disciplines. (DP-E)

- 4371 Phoon, W.O.** *Occupational health in the tropics.* Journal of Occupational Medicine (Chicago, Ill.), 19(7), Jul 1977, 458-463. Engl. 17 refs.

Divergences in occupational health between tropical and temperate countries are due to such factors as heat stress, biological hazards, genetics, levels of education and sophistication, and rapid industrialization. Special problems relating to ergonomics, skin pigmentation, women, accidents, attitudes toward authority, and religious, cultural and social factors are examined. The author advocates the establishment of tropical occupational health as a separate discipline with training received on location. A new course designed by the author is described. (Modified journal abstract.)

- 4372 Pugh, A.O., Chitsunge, P.J.** *Aspects of rural health; VI: health education.* Central African Journal of Medicine (Salisbury), 24(7), Jul 1978, 156-157. Engl.

See also entries 3580 (volume 6), 4230, 4266, 4453, 4454, and 4516.

Health projects in rural areas must deal with problems that are recognized as health hazards by the local population and can be dealt with in a way that is considered successful by all concerned. Examples are given from Rhodesia that show that immunization campaigns, while successful from the health worker's point of view, are unappreciated by a public whose children still suffer from plenty of other diseases; on the other hand, a mosquito-spraying campaign was popular with health workers because it reduced the incidence of malaria and with the people because it eliminated annoying insects. Suggestions are given on health education, especially audiovisual aids, and evaluation. (RMB)

- 4373 Pyakalia, T., Pust, R. B.C.G. scar surveys in Enga province: a medical anthropology note.** Papua New Guinea Medical Journal (Port Moresby), 20(3), Sep 1977, 141-142. Engl.

The BCG scar survey is considered to be the simplest, most accurate means of determining the extent of vaccination coverage for tuberculosis. However, problems arise in the highlands of Papua New Guinea where self-inflicted scars for decorative purposes are often confused with BCG scars. In order to end the confusion, a new anatomic site for BCG vaccination has been approved on the forearm where there are no competing decorative marks and where the scar can be easily exposed during surveys. (FM)

- 4374 Soejarto, D.D.** *Plants to control fertility.* World Health (Geneva), Aug-Sep 1978, 16, 18-19. Engl.

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

WHO has initiated research into the alleged fertility-regulating properties of certain traditional herbal preparations in an attempt to discover acceptable, safe, and inexpensive contraceptives derived from plants. So far, data on over 3 000 plants from 120 countries have been organized and six centres located in Brazil, Hong Kong, the Republic of Korea, Sri Lanka, the UK, and the USA are attempting to establish whether their effectiveness can be confirmed in the laboratory and, if so, to isolate and identify their active principles. Protocols and control measures used in the six centres are briefly discussed. (HC-L)

- 4375 Sylla, O.** *Définition d'une politique de recherche sur la médecine et la pharmacopée traditionnelles. (Definition of a research policy with regard to traditional drugs and medicine).* Médecine Moderne et Médecine Traditionnelle (Paris), 36, Jul 1977, 6-7. Fren.

In order to realize the potential of traditional African medicine and pharmacopeia, it is recommended that a global inventory of traditional medical resources be com-

piled, that a subcommission for research into traditional medicine be established within national medical research commissions, that accommodation for research into traditional medicine be made within official development plans, that current research into traditional medicine be intensified and coordinated, and that universities be put to their fullest use as research institutions. (HC-L)

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

See also: 4207, 4302, 4332, 4498, 4629, 4845.

- 4376 Adekunle, L.** *Child immunization—what are the impediments for reaching desired goals in a transitional society?* Social Science and Medicine (Oxford, UK), 12(5A), Sep 1978, 353-357. Engl. 14 refs.

A survey conducted in Ibadan, Nigeria, revealed that the principal impediments to child immunization were lack of time (principally cited by women engaged in petty trade), vaccine shortages in the clinic or health centre, and parental ignorance of the purpose and/or effects of immunization. To overcome these obstacles, it is suggested that the government ensure that vaccines are available at all times in facilities offering the service, establish a network of immunization centres (preferably located near market places) on a zonal basis, and encourage all health workers to make an effort to educate parents in the importance of immunization. Survey findings are set forward in four tables. (HC-L)

- 4377 African Medical and Research Foundation, Nairobi.** *Leprosy management.* AFYA (Nairobi), 12, Mar-Apr 1978, 45-51. Engl.

In view of several disturbing factors that have recently appeared in the field of leprosy treatment (i.e., the emergence of dapsone-resistant bacilli, the persistence of dapsone-sensitive organisms, and reduced patient compliance), an international group of leprologists met in 1977 to prepare guidelines for the application of therapies and drugs in large-scale disease control programmes. It was concluded that: dapsone should be given in combination with other drugs; combined regimens are theoretically desirable but impractical; because they require specialized knowledge, leprosy programmes cannot usually be integrated into general health services provided by auxiliaries; etc. A letter from ALERT listing their research and clinical findings is included. (RMB)

- 4378 Alvarez, M.L., Guzmán, M.T., Vial, M., Jaque, G., Gattas, V.** *Hábitos alimentarios. (Dietary habits).* Archivos Latinoamericanos de Nutrición (Caracas), 27(1), 1977, 124-139. Span. 18 refs.

Mothers of 264 Chilean families from different socioeconomic groups were questioned on the importance of different foods in their children's diet. Milk was considered important by most and 86% of the children had a high intake of milk. Meat and fish were also rated highly by most, but eggs by only 55% and poultry by 16%. Only 1.5% had meat 5 or 6 times weekly. Green

vegetables and fruit were given high priority by 83% and 44% and were eaten daily by 79.8% and 84%. Rice, bread, pastas, sugar, and beverages were not considered important. Educational level was the greatest variable affecting dietary habits and attitudes to food. (Modified journal abstract.)

- 4379 American Journal of Tropical Medicine and Hygiene, Baltimore, Md.** *Report of the American schistosomiasis delegation to the People's Republic of China.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(3), May 1977, 427-462. Engl.

From April 8-May 2, 1975, a delegation of US scientists visited the People's Republic of China to study recent advances in schistosomiasis control and management. Their report covers: the organization and implementation of the schistosomiasis control effort, including diagnostic tests, pest control, health education, environmental sanitation, etc.; epidemiology; research on the chemotherapy of schistosomiasis, including a number of clinical studies; and clinical management. Statistical data are included. (DP-E)

- 4380 Aranda-Pastor, J., Menchu, M.T., Palma, R., Kevany, J.P.** *Planning a food and nutrition surveillance system: the example of Honduras.* American Journal of Public Health (New York), 68(8), Aug 1978, 748-750. Engl.

This three-tiered nutrition surveillance system provides essential information for policy formation, programme planning, and evaluation in Honduras. It is organized on the basis of the participation and resources of seven national agencies and operates at the local, regional, and central levels. The system uses simple, readily available data on food supply and consumption and biological utilization. A graphic illustration of the system is included. (DP-E)

- 4381 Asogwa, S.E.** *Road traffic accidents; a major public health problem in Nigeria.* Public Health (London) 92(5), Sep 1978, 237-245. Engl. 26 refs.

Analysis of data over an 8-year period revealed that there were annually more deaths from road traffic accidents than from major communicable diseases in Nigeria. It is therefore recommended that doctors recognize road traffic accidents as a major public health problem and involve themselves not only in treating the injured but also in research on the epidemiology of accidents, the identification of medical conditions contraindicating driving, and driver education. Seven tables of data are included. (HC-L)

- 4382 Bader, M.B.** *International transfer of medical technology: an analysis and a proposal for effective monitoring.* International Journal of Health Services (Westport, Conn.), 7(3), 1977, 443-458. Engl. 46 refs.

The international transfer of medical technology to the developing countries occurs at four levels: medical education, research, and missions; multinational corporate transactions; technical assistance projects sponsored by

WHO; and bilateral foreign aid programmes. In this article, a proposal is made for effective monitoring of international medical technology transfer through political and legal means, including a specific code of conduct for corporations engaged in medical technology transfer. The development of intermediate health technologies and the advantages of such an innovation in terms of population issues and economic development are also discussed. (Modified journal abstract.)

- 4383 Barnes, L.A. Neonatal nutrition.** South African Medical Journal (Capetown), 52(9), 9 Jul 1977, 76-77. Engl.

Advantages of breast-feeding over bottle-feeding are stressed, with emphasis on the lower incidence of allergy and infection and possibly of obesity and gastrointestinal disorders in later life. Necessary modifications to cow's milk to make it suitable for infant feeding include lowering the NaCl, protein, and casein content to reduce the possibility of allergenic reactions, achieving a lactalbumin:casein ratio of 60:40 as in human milk, removing sucrose and polysaturated fats, and lowering the linoleic acid content to 9%. The physician should advise on water supply and preparation. (Modified journal abstract.)

- 4384 Barzelatto, J., Weinstein de Jaque, V. Self-reliance in research.** World Health (Geneva), Jul 1978, 12-15. Engl.

Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish. The Special Programme for Research and Training in Tropical Diseases sponsored by the World Bank, UNDP, and WHO has two principal objectives: to find safe, effective, and cheap measures against malaria, schistosomiasis, filariasis, trypanosomiasis, leishmaniasis, and leprosy and to foster the growth of a local research capability in affected countries. The 2nd objective was adopted on the premise that diseases are best understood and control measures best devised in the place where they occur. The programme plans to contribute to the training of national scientific personnel, the strengthening of national research institutions, and the transfer of new knowledge and skills from one country to another. (HC-L)

- 4385 Basta, S.S. Nutrition and health in low income urban areas of the Third World.** Ecology of Food and Nutrition (London), 6(2), 1977, 112-124. Engl. Refs.

This study demonstrates the profound differences in health and nutrition status that exist between various income groups in cities of the developing world. These intraurban differences seem to be greater than urban to rural differences. Adequate services, data collection, and programme planning are hampered in urban areas by the inability of decision-makers to recognize squatters as official city residents entitled to municipal services. The dependence on wage income, the instability of employment, and the high residential densities contribute to a high incidence of disease and malnutrition. Statistical data are included. (Modified journal abstract.)

- 4386 Basu, R.N., Khodakevich, L.N. National commission for assessment of the smallpox eradication programme in India.** Indian Journal of Public Health (Calcutta, India), 22(1), Jan-Mar 1978, 16-30. Engl.

In preparation for the April 1977 visit of an international commission of experts to certify the eradication of smallpox in India, the Indian government created a national commission to observe and encourage the process of smallpox surveillance and determine if there was any evidence of smallpox foci having occurred since the last case. The organization, membership, and activities of this commission are described. They made recommendations concerning the November 1976 search, intersearch surveillance, verification of diagnosis in cases of rash with fever, specimen collection, municipal surveillance, reporting, record-keeping, vaccinations, involvement of medical officers, and publicity. (DP-E)

- 4387 Beaton, G.H., Bengoa, J.M. ed(s). WHO, Geneva. Nutrition in preventive medicine: the major deficiency syndromes, epidemiology, and approaches to control.** Geneva, WHO, Monograph Series No. 62, 1976. 590p. Engl. Refs.

This comprehensive study of malnutrition is divided into 3 main sections covering the major deficiency syndromes, epidemiological aspects of malnutrition, and approaches to its control. The 1st section contains 9 chapters dealing with the treatment and prevention of nutritional deficiencies such as protein-energy malnutrition, anaemia, rickets, scurvy, beriberi, etc. Four chapters discuss epidemiological principles and the relationship between malnutrition and infectious diseases. The final section includes 15 chapters that describe the planning and implementation of preventive programmes, including nutrition education, supplementary feeding programmes, food marketing procedures, and food production techniques. Annexes provide complementary information on weight charts and methods of evaluating nutritional status. (Modified journal abstract.)

- 4388 Belcher, D.W., Sherriff, A.C., Nimo, K.P., Chew, G.L., Voros, A., Richardson, W.D., Feldman, H.A. Meningococcal meningitis in Northern Ghana: epidemiology and control measures.** American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(4), Jul 1977, 748-755. Engl. 32 refs.

Hospitalized meningococcal meningitis patients in northeastern Ghana during 1972-1975 were studied to provide baseline information about geographic location of cases and age-specific attack rates that could be used to guide meningitis control programmes. In 1973, group A meningococci prevalent and 7% of isolates were sulfadiazine-resistant. In contrast to the age distribution of meningococcal meningitis in North and South America, peak attack rates occurred in Ghanaians aged 10-14 years. A mass immunization campaign using group A polysaccharide vaccine in heavily populated areas of the Bawku and Nalerigu districts is recommended. (Modified journal abstract.)

- 4389 Bell, R.G.** *Undernutrition, infection and immunity: the role of parasites.* Papua New Guinea Medical Journal (Port Moresby), 21(1), Mar 1978, 43-55. Engl. Refs.

Studies have shown that immune responsiveness is commonly suppressed by severe malnutrition, particularly kwashiorkor, and a number of infectious agents, including viruses, bacteria, and protozoa and helminthic parasites. This paper reviews the literature concerning the interrelationships between undernutrition, infection, and immunity, emphasizing the importance of reducing the parasite load in any attack on child nutrition and indicating some directions for future research. An extensive bibliography on the subject is included. (HC-L)

- 4390 Blood, A.** *Maternal and child health in China.* Australasian Nurses Journal (Port Adelaide, Australia), 7(10), Jun 1978, 27-29. Engl.

In child health as in every other aspect of medical care, the Chinese emphasize prevention. Antenatal care, postnatal care, childhood immunization, school health, childhood diseases, and the training of child health personnel are briefly described. Although there are no statistics available on infant mortality, antenatal care beginning in the 6th month of pregnancy, hospital deliveries, and liberal benefits for working mothers have contributed to its decline. Barefoot doctors provide yearly examinations and immunizations until the child enters school. The most common childhood diseases are upper respiratory tract infections, tracheitis, pneumonia, and gastroenteritis. (DP-E)

- 4391 Breman, J.G., Alecaut, A.B., Malbert, D.R., Charter, R.S., Lane, J.M.** *Smallpox in the Republic of Guinea, West Africa; II: eradication using mobile teams.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(4), Jul 1977, 765-774. Engl. 28 refs.
Ninth International Congress on Tropical Medicine, Athens, Greece, 14-21 Oct 1977.
See also entry 4392.

Smallpox transmission was interrupted in the Republic of Guinea in January 1969, 13 months after the beginning of the national smallpox eradication programme and after approximately 60% of the population had been vaccinated. The eradication strategy was founded on recent epidemiological studies of smallpox in Guinea and surrounding countries and used mobile teams specifically trained for mass vaccination, assessment, surveillance, and epidemic investigation. Continued vigilance to detect any possible importation is needed and would best be part of a national surveillance programme. An acceptable immunity level to smallpox should be maintained in priority groups until worldwide eradication is achieved. (Modified journal abstract.)

- 4392 Bremen, J.G., Alecaut, A.B., Lane, J.M.** *Smallpox in the Republic of Guinea, West Africa; I: history and epidemiology.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(4), Jul 1977, 756-764. Engl. 31 refs.

Ninth International Congress on Tropical Medicine, Athens, Greece, 14-21 Oct 1977.

See also entry 4391.

The history and epidemiology of smallpox in Guinea is presented as background to a discussion of the eradication programme. Probably introduced to West and Central Africa by Islamic invaders after 700 AD, smallpox is first documented in Guinea in 1664. Periodic epidemics occurred at 10 year intervals in the 1930s and 1940s and at 5 year intervals from 1955-1967. The seasonal and geographic distribution of the disease and the age/sex pattern and mortality are examined. The highest incidence of smallpox tends to occur during the hot, dry season in the southwest region bordering on Sierra Leone. (FM)

- 4393 Brown, J.E., Brown, R.C.** *Finding the causes of protein-calorie malnutrition in a community; part I: a checklist.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(5), Oct 1977, 248-250. Engl.

See also entries 4394 and 4735.

A checklist designed to identify the community causes of protein-calorie malnutrition in young children is described. Divided into 4 sections, the questionnaire first determines the adequacy of household food supplies. It then examines methods of food production, habits in food purchasing, and food use and feeding patterns. For example, if food supplies are adequate, malnutrition could be caused by poor dietary habits; if supplies are inadequate, the problem could lie with inefficient farming methods, wasteful purchasing habits, or lack of cash. Thus, a nutrition investigator is able to pinpoint the problems and make recommendations based on the specific needs of a particular community. (FM)

- 4394 Brown, J.E.** *Finding the causes of protein-calorie malnutrition in a community; part II: notes on researching community food practices.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(5), Oct 1977, 251-253. Engl.

See also entries 4393 and 4735.

Methods of obtaining information regarding the customs of a community are described, using nutritional practices as an example. Four basic levels of collecting information exist: informants report general cultural rules and practices, informants report actual behaviour of other people, informants report their own behaviour, or trained observers report behaviour. All levels have their value, but reliability and accuracy must be taken into account. Three methods of sampling useful in field research on community customs are also described, including informal sampling, judgment sampling, and probability sampling. The method used will depend on the researcher's budget, staff, and time available. (FM)

- 4395 Bruce-Chwatt, L.J., de Zulueta, J.** *Malaria eradication in Portugal.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(3), 1977, 232-240. Engl. Refs.

Research on malaria, which was endemic in several parts

of Portugal at the beginning of the century, was intensified in the 1940s and led to the development of better control methods. In the 1950s, attention was shifted to eradication of the disease, which was accomplished by 1973. Recent political and military events have greatly increased the number of cases imported into Portugal from tropical Africa. A high degree of surveillance has prevented the resumption of transmission by local vectors, but vigilance must be maintained and intensified. (DP-E)

- 4396 Cajas Sosa, J.O.** *Principales riesgos que afectan el crecimiento y desarrollo integral del niño en Centro América. (Principal risks affecting the growth and development of the child in Central America).* Revista Centroamericana de Ciencias de la Salud (San José), 3(7), May-Aug 1977, 139-147. Span. 18 refs.

Risks to the growth and development of the child in Central America are of two orders: the risk of death, affecting children from birth to age 5 years, and the risk of permanently impaired potential, affecting the survivors in the years that follow. Statistical data are cited to show that these risks are the result of socioeconomic and political factors and therefore amenable to prevention and control. (HC-L)

- 4397 Caribbean Food and Nutrition Institute, Kingston, Jamaica.** *Medical examination of food handlers.* *Cajanus* (Kingston, Jamaica), 11(4), 1978, 242-248. Engl.

Many Caribbean countries require food handlers to be examined on at least an annual basis before a license to either the individual or the food establishment can be issued. In 1977, the Caribbean Epidemiology Centre established these guidelines: all examinations must be undertaken by government personnel only; a baseline examination, including history, chest X-ray, stool specimen, etc., should be undertaken on each new food handler; nurses should conduct yearly reexaminations; health education should be provided by nurses and public health inspectors on food handling practices; examinations should be held at times convenient to the industry; outbreaks of food-borne diseases should be investigated; and licenses should carry photographs. (DP-E)

- 4398 Castle, W.M.** *Measurement of socio-economic status in an urban African community.* *Tropical Doctor* (London), 8(1), Jan 1978, 44-48. Engl. Refs.

Poverty and affluence have interesting medical repercussions and attempts have been made to relate socioeconomic status to disease. This paper describes the development of an occupational index and discusses its validity when applied to workers in Salisbury, Rhodesia. The factors used in arriving at the index are education, clothing worn, and promotion information. Occupations are ranked from 1-6 and birth weights and intelligence test scores are found to be correlated to these ranks. The author suggests that the index is a useful epidemiological tool. (DP-E)

- 4399 Cedillos, R.A.** *Chagas' disease in El Salvador.* *Bulletin of the Pan American Health Organization* (Washington, D.C.), 9(2), 1975, 135-141. Engl. 21 refs.

Epidemiological studies of Chagas' disease in El Salvador have indicated the extent of *Trypanosoma cruzi* transmission in various areas studied and the disease's probable public health importance. Manifestations of both the acute and chronic phases of the disease appear milder than in most South American countries. Further studies are required. Statistical data are included. (DP-E)

- 4400 Cheek, D.B.** *Human growth—methods of approach.* *Australian Paediatric Journal* (Melbourne), 13(2), 1977, 77-87. Engl. Refs.

After a critical review of methodologies, it is suggested that the clinical study of growth and nutrition has not received the attention it deserves. Most of the work on growth in international centres has been left to the endocrinologist, who may or may not be informed about nutrition and may not be able to assess tissue growth. Even in units devoted to anthropometry, linear growth, and the consideration of weight for age, the potential for laboratory methods is not always appreciated. In the clinic, anthropometric measurements are important for assessing growth and represent the initial approach, but change in body size for age can also produce psychological change in the child. (Modified journal abstract.)

- 4401 Dow, T.E.** *Breastfeeding and abstinence among the Yoruba.* *Studies in Family Planning* (New York), 8(8), Aug 1977, 208-214. Engl. 8 refs.

This 1977 study of breast-feeding among the Yoruba of Nigeria draws on data from four previous studies. Variations in feeding patterns were found between the urban rich and educated on one hand and the urban and rural poor (who breast-fed their children longer) on the other. The former group had better access to modern medical amenities and were able to discontinue breast-feeding earlier without endangering the child. Generally, women who breast-fed longer also abstained from sexual relations for some time after giving birth. The implications of the findings for family planning are discussed. Statistical data are included. (DP-E)

- 4402 Dutta, H.M., Dutt, A.K.** *Malarial ecology: a global perspective.* *Social Science and Medicine* (Oxford, UK), 12, 1978, 69-84. Engl. 50 refs.

Epidemiological and ecological aspects of malaria are discussed in an attempt to identify the most susceptible geographical areas. The effects of temperature, rainfall, and physical landscape on the life cycle of the malaria vector, *Anopheles*, and malaria-causing parasites are described. Human activities that increase the possibility of contact with the parasite-carrying vector are also examined. Malaria eradication programmes carried out by WHO, as well as improved economic and cultural conditions that discourage the malaria cycle, have greatly reduced the incidence of the disease. However, it is felt that complete eradication is impossible without the development of a new vaccine. (FM)

- 4403 Effiong, C.E.** *Care of the low birthweight infant in Nigeria.* Tropical Doctor (London), 8(3), Jul 1978, 141-145. Engl. 13 refs.

The problems and care of low-birth-weight infants in Nigeria are discussed. The causes of low birth weight are described and the differences between this condition and prematurity are outlined. Common problems include respiratory disorders, poor control of body temperature, feeding difficulties, infection, anaemia, metabolic disturbances, and vitamin deficiency. Methods of controlling and treating all these problems are described. It is suggested that the infant can be discharged when its weight has reached 2 kg and it is feeding well from the mother's breast. Follow-up at clinics should continue until the age of 5 years. (FM)

- 4404 Eide, W.B., Skjonsberg, E., Papa, A., Bathily, A.** *Women in food production, food handling and nutrition; with special emphasis on Africa.* PAG Bulletin (New York), 7(3-4), Sep-Dec 1977, 40-49. Engl.

Also published in French and Spanish.

This report prepared for the UN Protein Calorie Advisory Group is based on data from history, nutrition, sociology, social anthropology, and UN research and policy documents from 1975-1977. It appraises information about women's role in food production, food handling, and nutrition in Africa and the extent to which conditions under which women live and work have a bearing on the availability of food and nutritional levels of their families and communities. Its specific objectives are to assess the adequacy of current research on women's role in these areas, indicate the linkage between food and nutritional status and various aspects of women's role in food production, and identify new directions in research to provide a basis for better planning and implementation of practical programmes. (DP-E)

- 4405 Ekwempu, C.C.** *Embryotomy versus Caesarean section.* Tropical Doctor (London), 8(4), Oct 1978, 195-197. Engl.

Obstructed labour, especially that due to cephalopelvic disproportion, is still common in developing countries for a number of reasons: maternal growth has been stunted by malnutrition, childbearing has begun before a mother's pelvis is fully developed, antenatal care is not available, or hospital delivery is not the custom. At Ahmadu Bello University, Nigeria, most cases of obstructed labour arrive after non-sterile interference by traditional birth attendants has failed and genital sepsis has set in. This paper describes the risks of Caesarean section and the advantages of embryotomy under such circumstances. (HC-L)

- 4406 Feigin, R.D.** *Interaction of nutrition and infection: plans for future research.* American Journal of Clinical Nutrition (Bethesda, Md.), 30(9), Sep 1977, 1553-1563. Engl. 57 refs.

This article discusses the aims of future research concerning the interactions between infectious disease and nutritional status. The effects of malnutrition on immune responsiveness, the utilization of host energy and

protein during infection, alterations in body chemistry in protracted diarrheal and respiratory diseases, and the optimal approach to iron nutritional needs or to those of other trace nutrients during infection are the areas singled out by the author. Research needs in each of these areas are listed. (DP-E)

- 4407 Food Technology, Chicago, Ill.** *Unconventional protein sources.* Food Technology (Chicago, Ill.), 31(5), May 1977, 173-195. Engl. Refs.
Symposium on Unconventional Protein Sources, 36th Annual Meeting of the Institute of Food Technologists, Anaheim, Cal., 6-9 Jun 1976.

These papers from a symposium at the 36th Annual Meeting of the Institute of Food Technologists deal with means of extracting edible proteins from unconventional sources. Animal sources include single-cell proteins (algae, bacteria, yeast, and fungi), many produced from waste products, and drum-dried protein from underutilized species of fish such as haleke. Protein can also be obtained from: unusual cereals (rice, oats, wheat, and maize); citrullus, apodanthera, cucurbita, and hibiscus seeds; legumes (jack beans, black-eyed peas, velvet beans, and pigeon peas); and leafy crops, principally alfalfa. Each article contains a lengthy bibliography. (DP-E)

- 4408 Forbes, G.B.** *Nutrition and growth.* Journal of Pediatrics (St. Louis, Mo.), 91(1), Jul 1977, 40-42. Engl.

Longitudinal growth data on children in the USA who developed obesity during childhood reveal a distinct tendency for height gain to accelerate coincident with or after the onset of excessive weight gain. The magnitude of the relative height increment is related to the degree of overweight. The relative food excess is in reality a form of overnutrition, indicating that the notion that obese children do not eat the proper type of food is an oversimplification. Statistical data are included. (DP-E)

- 4409 Foster, S.O., El-Sid, A.G., Deria, A.** *Spread of smallpox among a Somali nomadic group.* Lancet (London), 2(8094), 14 Oct 1978, 831-833. Engl.
See also entry 4892.

In 1977, a transmission of smallpox among 46 Somali nomads that had remained undetected for 5 months was discovered by a volunteer search and containment measures were instituted. Three other Somali villages also had smallpox outbreaks. The authors attribute the slow spread of the disease to the low virulence of the smallpox strain and the lifestyle of the nomads, who live mainly in the open and have little contact with one another. Nevertheless, isolated nomadic groups could provide a focus for the disease and the authors recommend careful surveillance of such populations for the next 2 years. Statistical data are included. (RMB)

- 4410 Ghosh, S., Manmohan** *Breast feeding.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(8), Aug 1978, 280-284. Engl.
Breast-feeding of infants in India is practiced by 80% of the rural population. However, reasons given for its

discontinuance in urban areas include: death of the mother, illness of mother or baby, working mother, advertising effects, inconvenience to mother, etc. Among its many advantages are the facts that: it is nutritionally best for the baby; it is a protection against anaemia and infection, especially diarrhea; the close contact with the mother is good for the infant; etc. Further efforts on the part of the health team are essential to motivate urban mothers to breast-feed their babies. (AF)

- 4411** Gongora, J., Shaw, D.J. *World Food Programme assistance for supplementary feeding programmes: review and recommendations*. Food and Nutrition (Washington, D.C.), 3(2), 1977, 15-20. Engl.

Recent World Food Programme (WFP) aid has been primarily directed at supplementary feeding programmes designed to improve the nutritional status of mothers and children. A brief review of such projects from 1963-1976 is followed by several recommendations. Increasing the emphasis on nutrition education, for example, would reinforce the immediate benefits of feeding programmes. Effective evaluation and monitoring systems are lacking. Provision must be made for follow-up activities to assist countries in assuming full responsibility after WFP aid has ceased. Finally, the approach to food aid should be broadened to cover longer-term goals of total health and sound food consumption and hygienic habits. (FM)

- 4412** González, G., Turizo, Y., Restrepo, A., Lopera, O., Maya, R. *Programa de vigilancia epidemiológica en pediatría. (Programme of epidemiological surveillance in pediatrics)*. Revista de la Escuela Nacional de Salud Pública (Medellín, Colombia), 1(2), Jan-Jun 1975, 11-25. Span.

A system of epidemiological surveillance is to be mounted at the children's hospital and the social pediatrics centre, department of pediatrics, University of Antioquia, Colombia. The purpose of the system is to establish on a permanent basis the means for collecting the information necessary to the orientation of the department's teaching programmes and the design and testing of preventive and control measures. The paper gives a detailed outline of the specific objectives relative to, and the activities to be developed by, the two institutions in question. (HC-L)

- 4413** Grzesiak, T. *Trypanosomiasis ouest et centrafricaine ou à Trypanosoma gambiense. (West and Central African trypanosomiasis or Trypanosoma gambiense - induced trypanosomiasis)*. Développement et Santé (Paris), (14), 1978, 2-8. Fren.

The diagnosis and treatment of African trypanosomiasis caused by *Trypanosoma gambiense* in West and Central Africa are discussed. Epidemiological features and the characteristics of the parasite and tse-tse fly vector are described. Development of the disease in both adults and children is traced. Methods of diagnosis of the two phases are followed by treatment procedures including

the use of drugs. Finally, the importance of community diagnosis and pest control is stressed in the context of programmes to control and eradicate the disease. (FM)

- 4414** Hathout, H., Al-Nakib, W., Lilley, H., Shalaby Abo-Ahmed, H., Nosseir, A.F. *Seroepidemiology of rubella in Kuwait: an alternative vaccination policy*. International Journal of Epidemiology (Oxford, UK), 7(1), Mar 1978, 49-53. Engl.

In order to have a sound basis for a vaccination policy, studies were conducted to determine the proportion of women of child-bearing age in Kuwait who are susceptible to rubella, a disease that often results in fetal damage if acquired in early pregnancy. Because of the low susceptibility (56 of 1 054 women examined, or 5.4%, were seronegative), the author suggests that a routine premarital test for rubella would be better than an expensive and potentially risky vaccination campaign. Statistical data are included. (DP-E)

- 4415** Hollinsteiner, M.R. *Environnement misérable de l'enfant dans les bidonvilles. (Deprived environment of the child in poor urban areas)*. Assignment Children (Geneva), 43, Jul-Sep 1978, 11-24. Fren.

Extracted from *Basic Services for Poor Children in Urban Areas of Developing Countries*, Paris, UNICEF, E/ICEF/L.1371, 3 Apr 1978.

More attention must be paid to the problems of children in poor urban areas. Malnutrition, unhealthy living conditions, overcrowding, and lack of proper maternal care are some of the effects of poverty that have a particular impact on the growth and development of children. The author also examines five major causes of and approaches to urban poverty: lack of material goods, faulty development planning that benefits the urban minority and increases the gap between rich and poor, unjust socioeconomic structures, underutilization of resources in an economy based on profit-making, and an unjust international economic order. (FM)

- 4416** Indo-Dutch Project for Child Welfare, Hyderabad, India. *Doctor, as a farmer how can I keep healthy? (Steps to raise the socio-economic standard of our rural areas)*. Indo-Dutch Project for Child Welfare Newsletter (Hyderabad, India), 2(2), Jul 1978, 1-3. Engl.

Health problems peculiar to Indian farmers include improper sanitary practices, inadequate sanitary facilities, irregular eating habits, neglect of illness or injury during the harvest, poor housing, disease transmission from animals and plants, and the use of snuff, cigarettes, or betel nuts. The author contends that the key to improving the farmer's health is the improvement of his economic position. The farmer will then be able to take steps to protect the health, security, and welfare of his family. (DP-E)

- 4417** Jacobs, D.S. *Syphilis in Australian Aborigines in the Northern Territory*. Medical Journal of Australia (Sydney), 14 Jan 1978, 10-12. Engl.

A marked increase in the incidence of syphilis in Australia

lian Aborigines in the Northern Territory has occurred in recent years. A total of 287 syphilis notifications relating to Aborigines in the northwest region of the Northern Territory during the 12-month period from Jun 1976-May 1977 are analyzed. An outline of how the Northern Territory Medical Service plans to deal with the situation is described. Statistical data are included. (Modified journal abstract.)

- 4418 James, W.P.** *Kwashiorkor and marasmus: old concepts and new developments.* Proceedings of the Royal Society of Medicine (London), 70(9), Sep 1977, 611-615. Engl. Refs.

For the last 30 years, there has been controversy surrounding the classification and causes of malnutrition in children. The relative importance of protein and energy supply and the interactions between protein and energy metabolism are still being worked out. Laboratory studies often fail to include the additional effects of infections to which children are often exposed in a tropical environment. As clinical investigations continue, it is becoming apparent that the problems of malnutrition are even more diverse than was at first thought and that other nutritional deficiency states must now be considered as important associated features of protein-energy malnutrition. (Modified journal abstract.)

- 4419 Japanese Association of Rural Medicine, Tokyo, Japan.** *Wither rural medicine?* Tokyo, Japanese Association of Rural Medicine, Apr 1970. Engl.
Fourth International Congress of Rural Medicine, Usuda, Japan, 30 Sep-4 Oct 1969.

Over 125 papers on rural medicine in Japan and other countries, presented at a week-long conference in Japan, are reproduced in this volume under these headings: toxicologic problems in agriculture, ergonomic aspects in agriculture (especially fatigue in farm work), anthropozoonoses in agriculture, and the effect of rural life on the health of its inhabitants. Papers related to rural epidemiology, health care delivery, nutrition, and sanitation are included under the last topic. Many papers contain statistical data. (HC-L)

- 4420 Jelliffe, D.B., Jelliffe, E.F.** *Breast feeding; a key measure in large-scale disaster relief.* Disasters (Oxford, UK), 1(3), 1977, 199-203. Engl. 9 refs.

By including in disaster planning a programme to ensure the continuation of breast-feeding at an optimal level, the vulnerable infant is protected from infection and malnutrition due to bottlefeeding under disaster conditions. At the same time, secondary problems of services to rehydrate infants with diarrhea are minimized. With neonates in developing countries under all circumstances, infant feeding is dependent on maternal nutrition, which should receive priority in a disaster. (DP-E)

- 4421 Jezek, Z., Basu, R.N.** *Operation smallpox zero.* Indian Journal of Public Health (Calcutta, India), 22(1), Jan-Mar 1978, 39-43. Engl.

In India, the last known case of smallpox occurred on May 17, 1975; the rapid elimination of smallpox from

India is attributed to the Anti-Smallpox Drive, which achieved its aim in 18 months. However, because smallpox foci have been known to exist undetected in other countries for up to 8 months, the author recommends that surveillance activities be continued for at least 2 years after the occurrence of the last known case of smallpox. Surveillance measures include: periodic active search operations; surveillance at fairs, markets, festivals, hospitals, and outdoor clinics; special surveillance in high-risk areas; continuous surveillance by surveillance teams and regular health staff; publicity for the smallpox reward; etc. (DP-E)

- 4422 Kazis, R.** *Hot chocolate.* New Internationalist (Wallingford, UK), 67, Sep 1978, 28-29. Engl.

In order to make up for the drop in sales that has accompanied declining birthrates in the industrial world, multinational corporations such as Nestle have been aggressively promoting bottle-feeding in Third World countries. Because most Third World families lack the facilities for sterilizing water, bottle, and nipple and because mothers extend the formula, which they cannot afford, by diluting it with water, the trend toward bottle-feeding has resulted in increased infant mortality from infection and malnutrition. This article describes the work of the Infant Formula Action Coalition (INFAC) in bringing pressure to bear on the multinational corporations to stop this unconscionable practice. (HC-L)

- 4423 Knodel, J.** *Breast-feeding and population growth.* Science (Washington, D.C.), 198, 16 Dec 1977, 1111-1115. Engl. 39 refs.

The trend away from breast-feeding, which is recent even in industrialized countries, may, in developing countries where contraception is uncommon, lead to both higher birth rates and, especially among the urban poor, higher infant death rates. The effect of breast-feeding on fertility is examined. Statistics also show that breast-fed infants have a higher survival rate than artificially-fed babies. When assessing the present and future demographic impact of changing feeding and health conditions, fertility and mortality should be considered jointly. (Modified journal abstract.)

- 4424 Koopman, J.S.** *Diarrhea and school toilet hygiene in Cali, Colombia.* American Journal of Epidemiology (Baltimore, Md.), 107(5), May 1978, 412-420. Engl. 12 refs.

In a 1976 survey of 14 elementary schools in Cali, Colombia, the prevalence of diarrhea, common cold, vomiting, and head lice in schoolchildren was measured in relation to classroom size and the condition of the school toilets. The study found that unhygienic toilet conditions were related to diarrhea and it was estimated that, if all the schools could reach the modest level of hygiene of the two schools with the relatively best facilities, diarrhea would be reduced by 44% and vomiting by 34%. Crowding was found to be related to a small percentage of the prevalence of vomiting, head lice, and colds. Statistical data are included. (Modified journal abstract.)

- 4425** Lall, S., Bibile, S. *Political economy of controlling transnationals: the pharmaceutical industry in Sri Lanka, 1972-1976*. International Journal of Health Services (Westport, Conn.), 8(2), 1978, 299-328. Engl.

From 1972-1976, the State Pharmaceutical Corporation of Sri Lanka implemented reforms in the structure of production, importation, and distribution of pharmaceuticals in the country despite the opposition of international drug companies. The roles of political leadership in regulating the power of international corporations and of the medical profession in resisting reform were of crucial significance. Complex problems of quality control, bioequivalence, medical acceptance, and consumer reeducation were also involved in lowering the cost of drug delivery. (DP-E)

- 4426** Lancet, London. *Child mortality—nutrition—gastroenteritis—water contamination*. Lancet (London), 2(8090), 16 Sep 1978, 616. Engl. 19 refs.

Various studies of the relationship between malnutrition and infection are reviewed. After the conflicting evidence is considered, it is concluded that it would be optimistic to expect that improvement in water supplies and environmental sanitation alone would solve the problem of malnutrition without related improvements in the practice of hygiene in the home. It is suggested that the subject of malnutrition be given special emphasis in 1979, the Year of the Child. (DP-E)

- 4427** Laurell, A.C., Blanco Gil, J., Machetto, T., Palomo, J., Pérez Rulfo, C. *Disease and rural development: a sociological analysis of morbidity in two Mexican villages*. International Journal of Health Services (Westport, Conn.), 7(3), 1977, 401-423. Engl. 28 refs.

A comparative study of two Mexican rural villages at different stages of development revealed that morbidity was significantly higher in the more developed village. This was attributed to a massive conversion of peasant farmers into wage labourers with unstable employment, which in turn gave rise to substantial migration and new, unfavourable living and working conditions. The authors argue that it is not development as such that is responsible for the increase in morbidity, but the particular form that it assumes. Statistical data are included. (DP-E)

- 4428** Luyken, R. *Medical research in Kenya; III: nutrition*. Tropical and Geographical Medicine (Haarlem, Netherlands), 29(2), 1977, Suppl.3, S25-S30. Engl. 33 refs.

Research into national nutrition problems in Kenya has covered malnutrition and child health, food intakes, school feeding programmes, nutritional surveys, and anthropometric measurement. Other nutrition research topics have included field studies on nutritional status and food intake, nutritional anaemia, vitamin A deficiency and milk intolerance, metabolic and other studies, and endemic goitre. (RMB)

- 4429** MacKenzie, J.S. *Virus infection, vaccination and protein-energy malnutrition*. Papua New Guinea Medical Journal (Port Moresby), 21(1), Mar 1978, 134-151. Engl. Refs.

With reference to studies of malnourished children in developing countries, this paper examines virus infections (especially measles) in mild and moderate protein energy malnutrition (PEM) and their role in precipitating severe PEM, the effects of virus infections in severe PEM, viral immunization in the malnourished, and immunocompetence and infection. Study findings underline the critical importance of the synergism between PEM and viral infections and the need for a continuing programme of mass vaccination. It is suggested, however, that such a programme either be planned to coincide with the season when children are best nourished or include a nutrition supplement. The danger of using attenuated vaccines on malnourished populations without prior assessment of their effects is pointed out. (HC-L)

- 4430** Margulies, L. *Critical essay on the role of promotion in bottle feeding*. PAG Bulletin (New York), 7(3-4), Sep-Dec 1977, 73-83. Engl. 29 refs. Also published in French and Spanish.

The International Center on Corporate Responsibility (ICCR) is a coalition of church groups that has raised the issue of unethical sales promotion with some US infant food manufacturers. It objects to the advertisement and sale of foods in underdeveloped countries on the grounds that this encourages bottle-feeding at the expense of breast-feeding and increases the incidence of infection and infant mortality. Advertisement through the medical and nursing services gives the impression of professional sanction. It was concluded that stopping sales promotion for infant foods would not alone eliminate malnutrition, but that sales promotion should nevertheless be stopped, preferably by government legislation. (Modified journal abstract.)

- 4431** Marsden, P.D. *Current concepts in parasitology; leishmaniasis*. New England Journal of Medicine (Boston, Mass.), 300(6), 15 Feb 1979, 350-352. Engl. 11 refs.

The epidemiology and diagnosis of visceral leishmaniasis (kala azar), mucocutaneous leishmaniasis, and cutaneous leishmaniasis are discussed. Antimonials are still the most effective treatment for all varieties of the disease, with amphotericin B for resistant cases. The author urges that further research be undertaken to study the value of serology in diagnosis and the possibility of developing both a vaccine and a cheap, non-toxic, orally administered, curative drug. (DP-E)

- 4432** Mauldin, W.P. *Patterns of fertility decline in developing countries, 1950-75*. Studies in Family Planning (New York), 9(4), Apr 1978, 75-84. Engl. Refs.

Using demographic data from many countries, the author established when, where, and by how much fertility has declined in recent years. He also studies the effects of changes in age-sex structures, age at marriage, and

marital fertility patterns on the crude birth rate and gross reproduction rates in developing countries. Since 1965, the tempo of fertility decline has increased, especially in larger countries. Although changes in age-sex composition of the population had little effect on the birth rate, a rise in the age at marriage was a significant factor. Marital fertility declines were also important. (FM)

- 4433 McDowell, I., Hoorweg, J.** *Environmental risk factors in outpatient recovery from malnutrition.* Ecology of Food and Nutrition (London), 6(1), 1977, 23-30. Engl. Refs.

Early in 1972, interviews were conducted with 64 mothers of malnourished children attending the outpatient section of the Nutrition Rehabilitation Unit in Kampala, Uganda, to examine the home environment of malnourished children in an effort to determine those factors most affecting their rate of recovery. The questionnaire used is included and the results are grouped into rural and urban categories. The study has broad implications for nutrition education, which should take into account different factors affecting the ability of rural and urban families to provide their children with proper food. Mothers and children who are considered likely to fail can then be given further assistance, such as food supplements or inpatient admission. (FM)

- 4434 McIntyre, R.C., Tira, T., Flood, T., Blake, P.A.** *Modes of transmission of cholera in a newly infected population on an atoll; implications for control measures.* Lancet (London), 1(8111), 10 Feb 1979, 311-314. Engl. 13 refs.

To determine the modes of transmission in a 1977 cholera epidemic in a newly infected South Pacific atoll population in the Gilbert Islands, two studies were conducted in which cholera cases were individually matched by age and sex with neighbourhood controls. In both studies, cholera was associated with frequent consumption of raw fish and other seafood from the lagoon. *Vibrio cholerae* was isolated from the lagoon water, which had been contaminated by human wastes. Statistical data are included. (Modified journal abstract.)

- 4435 Millo, L.** *Food standardization in Latin America.* Food and Nutrition (Washington, D.C.), 3(1), 1977, 16-19. Engl.

Although standards have been widely elaborated in Latin America for oils, fats, alcoholic beverages, juices, and jams, in most countries there has been little standardization of other food groups such as canned fruits and vegetables. In countries that have established the guarantee seal for products that meet an optional standard, very few food processors have adopted it. It is recommended that the national standardization agencies intensify by every means available information campaigns aimed at food producers/processors and at the consumer, in addition to continuing the standardization work on the same high technical level as before. Such information campaigns should be implemented in cooperation with existing food-control bodies. (Modified journal abstract.)

- 4436 Montgomery, E., Johnson, A.** *Machiguenga energy expenditure.* Ecology of Food and Nutrition (London), 6(2), 1977, 97-105. Engl. 10 refs.

The results of a study of energy expended at typical activities and on average days by adults of a hunter-gatherer-horticulturalist population in southeastern Peru are presented. Marked differences in patterns of energy use were found between the women (1 925 calories:day) and the men (3 200 calories:day). Seasonal analysis reveals an even greater contrast during the wet months. Factors such as environment, technology, work settings, and population composition are related to the findings. Statistical data are included. (Modified journal abstract.)

- 4437 Murtagh, K.** *Advantages of breast feeding.* Papua New Guinea Medical Journal (Port Moresby), 20(4), Dec 1977, 157-159. Engl. 9 refs.

In response to a survey of mothers in Papua New Guinea, recommendations are made to encourage breast-feeding. These include provisions for working mothers to breast-feed and increased government support for a variety of educational campaigns to heighten awareness of the advantages of breast-feeding. Low cost and convenience, increased protection against infection, lower risk of cot deaths in children and carcinoma of the breast in mothers, and better nutrition are some of the benefits that should be stressed. (FM)

- 4438 Nelson, J., Mandl, P.E.** *Peri-urban malnutrition, a neglected problem; patterns and approaches.* Assignment Children (Geneva), 43, Jul-Sep 1978, 25-46. Engl.

Approaches to improving the nutritional status of the urban poor are discussed. On-site feeding programmes allow mothers to work while nursing. Community kitchens, supplementary feeding by health centres, and school meals provide many children with at least one nutritious meal a day. Promotion of locally-made weaning foods eliminates the reliance on expensive, imported products and fortification of staple foods makes up for nutrient deficiencies. Urban agriculture increases the food supply. Improvements in food distribution and pricing are also effective, while nutrition education programmes and nutrition rehabilitation centres attempt to change consumption habits. Finally, income-generating projects for women improve their ability to provide for their children. (FM)

- 4439 New Zealand Medical Journal, Wellington.** *Breast feeding: a statement of the Infant Nutrition Subcommittee of the Paediatric Society of New Zealand.* New Zealand Medical Journal (Wellington), 86(593), 10 Aug 1977, 144-147. Engl. 63 refs.

The immunological factors of human milk are examined, since breast-feeding has been proven to protect infants against gastroenteritis, respiratory diseases, otitis media, moniliasis, allergic disorders, etc. Its nutritional superiority is stressed and possible psychological benefits are mentioned. The nutritional problems associated with infant formulae are examined and bottle-feeding is

also criticized for being expensive and frequently unhygienic. Reasons why women choose not to breast-feed are discussed. (DP-E)

- 4440 Okwesa, B.A.** *Strategies in the nutrition education of patients.* Cajanus (Kingston, Jamaica), 10(2), 1977, 97-104. Engl.

Nutrition education is the responsibility of the entire health team, not just the specialists. Changing eating practices is not easy and the patient should be encouraged to take the initiative. The information passed along to the patient must be intelligible and relevant to his level of awareness and needs. Broadcast, print media, and informal meetings can all be effective in arousing interest in the subject. The impact of current food and nutrition programmes on government departments and agencies should be evaluated and the efforts of the health team coordinated with them. (DP-E)

- 4441 Omene, J.A., Diejomaoh, F.M.** *Factors influencing perinatal mortality in a Nigerian community.* East African Medical Journal (Nairobi), 54(4), Apr 1977, 202-206. Engl. 17 refs.

One hundred and six perinatal deaths among 1 310 deliveries (80.9 deaths: 1 000 deliveries during 1974-1975 at the University of Benin Teaching Hospital in Nigeria) were reviewed. The main obstetric causes of fetal death were antepartum haemorrhage, cephalopelvic disproportion, malpresentations, twin pregnancies, and congenital abnormalities, while asphyxia was the major cause of neonatal death. Factors responsible for the significant fetal and perinatal mortality during the last 6 months are discussed. Statistical data are included. (Modified journal abstract.)

- 4442 Oosterink, J.G.** *Some ophthalmic and public health aspects of onchocerciasis in Bawku district (northern Ghana).* Ophthalmologica (Basel, Switzerland), 176(5), 1978, 297-298. Engl.

Some of the health consequences of the high incidence of onchocerciasis in northern Ghana are discussed. Damage caused by the disease to the cornea, anterior chamber, iris, pupil, and lens is outlined. Glaucoma and cataracts are common sequelae. In an attempt to control the situation, a health programme has been set up in the Bawku district. Villagers are examined and treated and spraying is carried out in the Volta basin area to control the breeding places of the vector. Rehabilitation of the blind is also part of the programme to improve the socioeconomic conditions of the people involved. (FM)

- 4443 Pacey, A. ed(s).** *Sanitation in developing countries.* New York, John Wiley and Sons, 1978. 238p. Engl. Refs.
Conference on Sanitation in Developing Countries, Oxford, UK, 5-9 Jul 1977.

This collection of conference papers covers such topics as: definition of the problem of excreta disposal in developing countries; an engineering view of health, with reference to parasitic infections and the impact of sanitation; the choice of proper technology for sanitation in the tropics; conventional sewerage including aqua privies,

pit latrines, composting latrines, bucket latrines, night soil collection, etc.; technology to serve the urban poor; the social factor in sanitation programmes, re-use of water, and health; and technology, health, and human behaviour. Many papers contain references and statistical data. (RMB)

- 4444 PAG Bulletin, New York.** *Infant feeding in the less developed countries: an industry viewpoint; statement by the International Council of Infant Food Industries (ICIFI).* PAG Bulletin (New York), 7(3-4), Sep-Dec 1977, 62-72. Engl. 43 refs. Also published in French and Spanish.

The International Council of Infant Food Industries (ICIFI) was formed in November 1975 to defend the sale and promotion of artificial foods in developing countries. It argues that restrictions on artificial foods will not necessarily reduce infection or malnutrition. The ICIFI claims that the main users are affluent or working women, who are educated enough to use them correctly, and poor women with inadequate lactation, who might be forced to use unsuitable substitutes instead. In addition, the ICIFI has developed documents concerning the proper use and preparation of infant foods to be translated into local dialects and an easily-cleaned feeding utensil to avoid the disadvantages of bottles, cups, and spoons. (Modified journal abstract.)

- 4445 Pan American Health Organization, Washington, D.C.** *Facts and figures on health in the Americas: a review of major trends.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(2), 1978, 154-167. Engl.

This article presents an overview of long-term trends in health conditions in the Americas from 1950-1975. Statistical data on population size and distribution, life expectancy, childhood morbidity and mortality, nutritional status, health manpower (especially physicians and nurses), hospital resources, and water supply services are included. (DP-E)

- 4446 Paulo Forattini, O., Pupo Nogueira, D.** *Effects of tropical disease on the working capacity.* Journal of Occupational Medicine (Chicago, Ill.), 19(7), Jul 1977, 485-486. Engl.

Tropical diseases that affect the working capacity of the Brazilian population fall into two categories: those that occur in natural foci and are independent of human participation (e.g., yellow fever and cutaneous-mucous leishmaniasis) and those that may or may not occur in natural foci but do depend on human participation (e.g., malaria, trypanosomiasis, schistosomiasis, and ancylostomiasis). This paper discusses the varying degree of impairment caused by these diseases and the implication of this difference for their prevention and control. (HC-L)

- 4447 Peel, S.** *Coping with disaster: practical relief and preventive measures.* Disasters (Oxford, UK), 1(3), 1977, 179-197. Engl.

This article, written to accompany a feeding kit, outlines emergency feeding procedures to be adopted during or

following a disaster. The author discusses the organization of the supplementary and therapeutic feeding programmes (SFP, TFP) that should follow the organization of a general feeding programme. The SFP involves adding energy and/or protein foods to the daily ration of at-risk groups such as children, pregnant and lactating mothers, and the elderly. The TFP is aimed at the severely malnourished, usually children. Practical guidelines for the assessment of nutritional status, feeding, and other problems are given. (DP-E)

- 4448 Peters, J., Jutsum, P.** Cajanus, Kingston, Jamaica. *Development of new food products: nutritional considerations.* Cajanus (Kingston, Jamaica), 11(3), 1978, 146-148. Engl.

The release of a new range of products by a Jamaican food manufacturing company is the subject of brief comments by several writers. One, a nutrition educator, is concerned that there is too much emphasis on profits and too little on nutrition in marketing foods and wonders if consumer or government pressure should be brought to bear in this area. The other writer applauds the creation of jobs resulting from the manufacture of new products but worries that poor people may be induced to squander their food dollars on popular but non-nutritious foodstuffs. (DP-E)

- 4449 Phoon, W.O.** *Application of ergonomic principles in the factories of a developing country.* Journal of Human Ergology (Tokyo), 5(2), 1976, 161-166. Engl.
International Symposium on Impacts of Industrialization and Ergonomics in Asia, Tokyo, Japan, 27 Sep 1976.

Several examples of the need for the application of sound ergonomic principles in Singapore factories are presented. The need to consider local habits and customs in the devising of ergonomic solutions to occupational health problems is emphasized. Examples are given concerning vehicle cabin design, difficulties due to climatic differences in applying personal protective equipment or in building design, inadequate displays warning of dangers, and health consequences of technical improvements, safety measures, or measures to achieve greater efficiency. Sometimes ergonomic practices may promote productivity but be prejudicial to health. (Modified journal abstract).

- 4450 Population Center Foundation of the Philippines, Manila.** *Initiatives in population.* Manila, Population Center Foundation of the Philippines. Engl.

This quarterly journal published by the Population Center Foundation of the Philippines presents issues in population and family planning. Articles cover such topics as contraception, mass campaigns and family planning programmes, moral and religious issues, family planning manpower and auxiliaries, legislation, the status of women, etc. Books and films dealing with family planning are reviewed and a correspondence section invites readers' comments. (DP-E)

- 4451 Porter, M.J.** *Problems and priorities for dermatology in developing countries.* International Journal of Dermatology (Philadelphia, Pa.), 17(3), Apr 1978, 233-236. Engl. 20 refs.

Studies have shown a high incidence of skin diseases, mostly infectious ones, in developing countries. At the same time, it is clear that the prevalence of skin diseases decreases as socioeconomic conditions improve. Therefore, the author suggests that the problem can best be solved by a combination of education, low-cost medicines, better sanitation and water supplies, improved housing, and adequate nutrition. This article deals mainly with the education issue, particularly the training of developing country dermatologists, and experimentation with simple, readily available medicines. (DP-E)

- 4452 Prata, A., Marsden, P.D.** *Infectious disease in Brazil today.* Canadian Journal of Public Health (Toronto, Ont.), 68(3), May-Jun 1977, 204-209. Engl. 12 refs.

The pattern of human infectious disease currently encountered in Brazil is discussed. As control of certain viral and bacterial diseases is improved, protozoan and helminthic diseases are assuming greater importance, particularly Chagas' disease, leishmaniasis, and schistosomiasis. To date, no infectious agents have been isolated for several common clinical syndromes, including *foliaceus pemphigus* and the Altamira haemorrhagic syndrome, although there is evidence that they may be found in the future. (Modified journal abstract.)

- 4453 Pugh, A.O., Ngwerume, N.** *Aspects of rural health; III: better sanitation.* Central African Journal of Medicine (Salisbury), 24(4), Apr 1978, 76-77. Engl.

See also entries 3580 (volume 6), 4230, 4266, 4372, 4454, and 4516.

This article describes the efforts of a health assistant in a rural African village to encourage the construction of some 102 sanitary pit latrines. He finally won the trust and respect of the villagers and was eventually able to arouse their interest in the project. Another crucial element was the availability of an effective, inexpensive, and acceptable form of sanitation. Also important was the support of the Provincial Department of Health and other Matabeleland government departments in getting the scheme off the ground and helping to build the latrines. The success of this project has led to a demand for more such initiatives in the region. (DP-E)

- 4454 Pugh, A.O., Chademana, S.R.** *Aspects of rural health; II: better water supplies.* Central African Journal of Medicine (Salisbury), 24(3), Mar 1978, 53-55. Engl.

See also entries 3580 (volume 6), 4230, 4266, 4372, 4453, and 4516.

The provision of adequate supplies of clean water, the most important single factor in improving family health in rural communities, can be difficult and expensive to attain. For one health assistant in Rhodesia, the greatest obstacles to this goal were a lack of funds and the villagers' scepticism as to the importance of clean water. With

moral support from his department and other interested sources, and with much patient discussion, he finally created a demand for wells. Taking advantage of the interest shown, he organized well-building competitions, which resulted in many wells being built by the users at minimal cost. (DP-E)

- 4455 Raimbault, A.M., Berthet, E., Villod, M.T., Dupin, H.** *Food, nutrition, health and development.* Children in the Tropics (Paris), (107), 1977, 3-58. Engl.

The interrelationship of food, nutrition, and child health in the tropics is discussed. Nutritional needs, the importance of protein, recommended diets, and the nutrient values of different foodstuffs are examined, as well as the special needs of children and pregnant and nursing mothers. The forms and treatment of childhood malnutrition are described, with emphasis on the agricultural, social, and economic causes. Long-term effects of protein-calorie malnutrition on growth and development in children are also discussed. Preventive health care measures that can be taken within the community are stressed, as is the importance of nutrition education at home and in the school. A final chapter deals with the interaction of malnutrition and childhood diseases. (FM)

- 4456 Rao, A.R.** *Human breast milk as commercial infant food.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(6), 1977, 286-288. Engl. 21 refs.

The possibility of collecting breast milk in Indonesia and paying donors with food supplements and cash is examined. The milk may be pasteurized and sold fresh or stored frozen and spray-dried. Women may be registered as potential donors during pregnancy and helped to achieve good lactation. Similar programmes in Argentina, the USA, and Japan are mentioned. (Modified journal abstract.)

- 4457 Reed, D.M.** *Current health problems in the South and Central Pacific.* New Zealand Medical Journal (Wellington), 85(486), 27 Apr 1977, 326-329. Engl.

Tabulation of monthly reports of infectious diseases from 19 countries and territories in the South and Central Pacific for the years 1973-1975 indicated that influenza-like illness, dengue, dysentery, measles, and gonorrhoea were the major causes of morbidity. Infectious respiratory diseases, gastroenteritis, and accidents were the most common problems requiring hospitalization in most Pacific countries. The major causes of death were infectious diseases in the traditional areas and chronic diseases such as cardiovascular disease and cancer in the modernized areas. Statistical data are included. (Modified journal abstract.)

- 4458 Richardson, B.D.** *Growth.* South African Medical Journal (Capetown), 51(20), 14 May 1977, 691. Engl.

This short review mentions a modern theory that states that where body weight and height are in good propor-

tion, the children are within normal limits of growth. Humans have proven to be versatile and adaptable and become short or tall, thin or fat, according to the environment and circumstances. Provided the child is healthy and feels well, whether or not he, or she, is within the "range of normality" is not important. (Modified journal abstract.)

- 4459 Ronaghy, H.A.** *Symposium on Food Science and Nutritional Diseases in the Middle East.* American Journal of Clinical Nutrition (Bethesda, Md.), 23(11), Nov 1970, 1418-1421. Engl. Symposium on Food Science and Nutritional Diseases in the Middle East, Shiraz, Iran, 27-30 Apr 1970.

The Symposium on Food Science and Nutritional Diseases in the Middle East was attended by members of 5 Iranian universities, 13 Iranian organizations, 10 foreign countries, and 4 international organizations; participants presented the results of recent research into nutrition and nutrition-related problems. This paper summarizes the participants' reports under these headings: growth and development, malnutrition-socioeconomic and environmental factors, protein-calorie malnutrition, trace metal deficiencies, vitamin deficiencies, and malnutrition and disease. (HC-L)

- 4460 Royal Society of Tropical Medicine and Hygiene, London.** *Seventeenth seminar on trypanosomiasis.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(1), 1977, 1-15. Engl. Refs. Seventeenth Seminar on Trypanosomiasis, London, UK, 23-24 Sep 1976.

Summaries of papers presented at this conference on trypanosomiasis are accompanied by discussion notes and a list of related laboratory experiments. Session 1 deals with trypanosome biochemistry and its relevance to control. Session 2 studies the role of laboratory research in tsetse control, including papers on the physiology of the tsetse fly and the testing of insecticides. The 3rd session reviews protozoological and serological methods of field diagnosis of trypanosomiasis. The final session examines problems of land use with emphasis on the integration of rural development and tsetse control programmes and the ecological implications of trypanosomiasis control. (FM)

- 4461 Salubritas, Washington, D.C.** *But why aren't you breastfeeding your baby?* Salubritas (Washington, D.C.), 2(3), Jul 1978, 1-3. Engl.

The recent trend away from breast-feeding is attributed to a number of causes, including lack of knowledge and commitment by health personnel. The misconception that undernourished mothers cannot produce enough milk is common in developing countries. The commercial influence of heavy advertising by infant food companies is another factor in the shift to artificial feeding. Health workers should begin during the prenatal period to stress the advantages of human lactation and to prepare mothers for nursing. The nutritional, economic, and hygienic

advantages of breast milk are listed and the technique of breast-feeding is illustrated. (FM)

- 4462 Schuftan, C.** *Nutrition research: wrong direction?* Agenda (Washington, D.C.), 2(8), Oct 1979, 23. Engl.

The author feels that nutrition researchers give too much attention to objective, scientific detail and not enough to the overall problems and causes of malnutrition, particularly in the areas of lack of income, attitudes, customs, inadequate knowledge, and the effect nutritional status has on the susceptibility of some people to various diseases. Some socioeconomic indicators that appear to predict nutritional risk are employment, additional food requirements of people living in harsh environments, the impact of urbanization, and dwindling food supplies that severely affect the costs of nutritional programmes. All these variables lead to malnutrition and have poverty as their common denominator. (AF)

- 4463 Selwyn, S.** *Cholera old and new.* Proceedings of the Royal Society of Medicine (London), 70(5), May 1977, 301-302. Engl. Refs.

A resilient and well-documented disease, cholera has had good as well as bad effects. The author summarizes its history and relates the various reactions to it and the myths that surround it. He notes that the high incidence of cholera has led to much-needed sanitary reforms and public health legislation and has stimulated medical research and cooperation. Current attempts at understanding the disease are examined. (DP-E)

- 4464 Smith, A., Hansford, C.F., Thomson, J.F.** *Malaria control: epidemiological research in southern Africa.* WHO Chronicle (Geneva), 31(3), Mar 1977, 105-107. Engl.

Also published in French, Russian, and Spanish. Research conducted in the Transvaal, South Africa, from October 1973-September 1976 provided important epidemiological information on malaria that could be used as the basis for a control programme. Serological surveys were carried out in order to develop more sensitive methods of assessing the malaria situation and study the rate of regression of indirect fluorescent antibody titres in the population. Entomological investigations that identified vectors and the point of contact between the vector and man were also used to recommend better control methods. Annual house spraying with DDT has almost eliminated the two main vectors, but a new variety of mosquito has been discovered and must be closely monitored. (FM)

- 4465 South Africa, Department of Health.** *Code of ethics for infant food manufacturers.* South African Medical Journal (Capetown), 52(13), 17 Sep 1977, 540-541. Engl, Dutch.

The official announcement is made of a 12-point code of ethics agreed between the Department of Health, the Medical Association of South Africa, and the manufacturers and distributors of infant foods. The latter have promised to inform their users that breast-feeding is best and their products are not equal to human milk, provide

explicitly-worded instructions for reconstitution with emphasis on the need to use safe water, refrain from hiring professional nurses and midwives to distribute their product to the detriment of breast-feeding, etc. (Modified journal abstract.)

- 4466 Sprague, H.A., May, J.T.** *Family age in the epidemiology of family health.* Social Science and Medicine (Oxford, UK), 12(4A), Jul 1978, 271-275. Engl. 10 refs.

This paper presents a method of accounting for the varied ages of family members when the family as a whole is used as the unit of analysis in a biostatistical-epidemiological investigation of family health status. A study of 594 families in Pennsylvania, USA, shows the use of the variables obtained. Statistical data are included. (DP-E)

- 4467 Taufa, T.** *Malaria and pregnancy.* Papua New Guinea Medical Journal (Port Moresby), 21(2), Jun 1978, 197-206. Engl. 42 refs.

Current literature on malaria control and the effects of the disease on pregnant women and the fetus is reviewed. The role of the placenta as an exchange organ and as the 1st defense line for the fetus is described. Immunological and hormonal changes may explain the reduced resistance to malaria during pregnancy. Effective control of malaria results in reduced maternal anaemia and increased birth-weights. Prophylaxis, treatment, and other antimalarial measures are more beneficial to the primipara than to multiparous women. Statistical data are included. (Modified journal abstract.)

- 4468 Vahlquist, B.** *Mangelkrankheiten bei Kindern der Dritten Welt: Beispiel Äthiopien. (Deficiency diseases in children in the Third World: the example of Ethiopia).* Monatsschrift für Kinderheilkunde (Berlin), 125(19), Oct 1977, 858-864. German. 34 refs.

The monotony and bulkiness of the traditional diet, the often sparse number of meals, and hungry seasons make the nutritional situation precarious for the large vulnerable groups, particularly children, in the developing world. This paper reviews different nutritional deficiency diseases affecting children in the Third World with practical illustrations derived mainly from Ethiopia. Cooperation between Sweden and Ethiopia in the field of nutrition research in the period 1962-1975 is discussed. (DP-E)

- 4469 Vaughan, J.P.** *Brief review of cardiovascular disease in Africa.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(3), 1977, 226-231. Engl. Refs.

This review aims to examine both hospital and community-based studies in order to assess the importance of cardiovascular disorders and look for any evidence of changing disease patterns in developing African nations. Available data indicate, among other things, that the incidence of coronary heart disease and hypertension, which are generally rare among Africans, has increased significantly in urban areas and there is a high preva-

lence throughout the continent of cardiomyopathies and systolic murmurs. (DP-E)

- 4470 Vyhmeister, I.B., Register, U.D., Sonnenberg, L.M.** *Safe vegetarian diets for children*. Pediatric Clinics of North America (Philadelphia, Pa.), 24(1), Feb 1977, 203-210. Engl. 24 refs.

The basic principles of vegetarianism and some practical approaches to providing diets with adequate amounts of nutrients for small children are outlined. Protein, calcium, iron, riboflavin, vitamin B, and zinc content of various foods are discussed. Food guides give information on proper meal planning to ensure variety and nutrition. Sample menus indicate typical meals for children aged 9 months-12 months. (FM)

- 4471 Waterlow, J.C., Buzina, R., Keller, W., Lane, J.M., Nichaman, M.Z.** *Presentation and use of height and weight data for comparing the nutritional status of groups of children under the age of 10 years*. Bulletin of the World Health Organization (Geneva), 55(4), 1977, 489-498. Engl. 20 refs. Also published in French and Russian.

This paper presents recommendations for the analysis and presentation of height and weight data from surveillance or surveys involving nutrition and anthropometry in children aged up to 10 years. These recommendations are only for the analysis of data collected on a cross-sectional basis. The basic indices recommended are height:age and weight:height, each considered either in terms of centiles or in a cross-classification scheme using standard deviation scores. It is hoped that these methods of analysis and presentation will prove widely acceptable, so that international comparisons will be made easier. (Modified journal abstract.)

- 4472 Whitehead, R.G.** *Protein and energy requirements of young children living in the developing countries to allow for catch-up growth after infections*. American Journal of Clinical Nutrition (Bethesda, Md.), 30(9), Sep 1977, 1545-1547. Engl.

Children who have lost weight because of infection or other causes need to produce catch-up growth after the illness is over. This growth can be rapid and requires a higher minimum protein intake than does normal growth. This article illustrates the calculation of protein-energy ratios suitable for catch-up growth using examples from Uganda and Gambia. Statistical data are included. (DP-E)

- 4473 WHO, Geneva.** *Research in human reproduction: strengthening of resources in developing countries; report of a WHO study group*. Geneva, WHO, Technical Report Series No. 627, 1978. 16p. Engl.

Also published in French, Russian, and Spanish. A WHO study group on the Strengthening of Resources in Developing Countries for Research in Human Reproduction met in Geneva from July 24-28, 1978. The members were directors of research institutions in Ar-

gentina, Egypt, India, Mexico, Pakistan, Singapore, Korea, Thailand, and Cameroon. Using a case-history approach, they presented a detailed historical analysis of the development of their institutions. This document discusses their findings and recommendations in the area of origin and setting of research groups, programme content and review, staffing, training, consultants, facilities, and funding. (DP-E)

- 4474 WHO, Geneva. Kenya, Ministry of Health.** *Measles immunity in the first year after birth and the optimum age for vaccination in Kenyan children*. Bulletin of the World Health Organization (Geneva), 55(1), 1977, 12-31. Engl. 17 refs.

Also published in French and Russian.

This 1974-1975 Kenyan study was undertaken to determine the optimum age for mass vaccination programmes in developing countries, where the incidence of measles is higher among infants than it is in developed countries. It was found that, since 90% of children no longer have their maternal antibodies at 7-8 months of age, 30 weeks could be considered the optimum age for vaccination in countries with conditions similar to those of Kenya. It can reasonably be expected that immunity after age 1 year will last for 3-5 years, thus exceeding the period when African children are most exposed to malnutrition. Statistical data are included. (RMB)

- 4475 WHO, Geneva. FAO, Rome.** *Food and nutrition strategies in national development; ninth report of the Joint FAO/WHO Expert Committee on Nutrition*. Rome, FAO, FAO Food and Nutrition Series No. 05, FAO Nutrition Meetings Report Series No. 56, and WHO Technical Report Series No. 584, 1976. 74p. Engl. 15 refs.

Ninth Session of the Joint FAO/WHO Expert Committee on Nutrition, Rome, Italy, 11-20 Dec 1974.

Participants in the 9th session of the Joint FAO/WHO Expert Committee on Nutrition examined the present food and nutrition situation, past approaches to the problem, the need for a new approach, an approach to food and nutrition planning, food and nutrition planning and its implementation, and research needs. Annexes contain a classification scheme for undernourished populations as a basis for food and nutrition planning and a section on the evaluation and surveillance of nutrition programmes. A list of participants is included. (RMB)

- 4476 Yunus, M., Zaheer, M., Sinha, S.N.** *Prevalence of intestinal parasites (a rural study)*. Journal of the Indian Medical Association (Calcutta, India), 69(11), 1 Dec 1977, 241-245. Engl. Refs.

In a 1972 study, stool samples were collected from 91.3% of the population of three Indian villages and examined for parasites. Data were collected from the sample population on age, sex, literacy, occupation, social class, defecation habits, and type of parasite. Infestation prevalence was high (42.2%), with helminthic and protozoal infestations the most common. Statistical data are included. (DP-E)

III Primary Health Care—Implementation

III.1 Rural Inpatient Care

See also: 4497, 4604, 4606, 4607, 4660.

4477 Arora, S., Antia, N.H. *Treatment of burns.*

Burns (Bristol, UK), 4(1), 1977, 49-51. Engl.

A 1975 experimental project in Thana district, India, demonstrates that it is feasible to undertake adequate treatment of burns in small district and rural hospitals at a fraction of the cost of a sophisticated burns unit. This can be achieved by simple modification of or addition to existing facilities. Appropriate personnel should also be trained in their own hospital setting rather than in an urban burns centre. The service can then continue to operate with occasional supervision by the staff of a burns or plastic surgery unit of a teaching hospital. Treatment procedures and results are reported. (DP-E)

4478 Biron, R., Goodman, P. *Problem-oriented medical record as a training tool for staff.* Hospital and Community Psychiatry (Washington, D.C.), 28(12), Dec 1977, 909-911. Engl.

A problem-oriented medical record, developed for use in an American psychiatric hospital, has proved to be an efficient tool for tracking patients' treatment needs and progress and a valuable aide to training mental health workers in proper record-keeping, clinical thinking, and logical treatment planning. The record incorporates four components (data base, problem list, treatment plan, and progress notes) plus other elements required by the hospital's bureaucracy; it is geared to the concept of the multidisciplinary treatment team. This paper describes the record form and the evolution of a methodology for training staff in its use. (HC-L)

4479 Boroffka, A., Olatawura, M.O. *Community psychiatry in Nigeria: the current status.* International Journal of Social Psychiatry (London), 23(4), Winter-1977, 275-281. Engl.

Over a period of 50 months, 512 psychiatric patients were treated in the Aro Village therapeutic community in Nigeria. The majority of those admitted had symptoms of psychosis. By the end of 3 months, 57.8% had been discharged, while 88.9% were discharged by the end of 5 months. Of these, 70.3% were judged fit to return to their jobs. The relatives of patients as well as the villagers and health personnel were involved in the treatment programme. The advantages of this method are discussed, as well as the implications for the future of the programme of the loosening of traditional family ties due to rapid urbanization. (Modified journal abstract.)

4480 Bourgeade, A., Nguemby Mbina, C., Kadio, A. *Rehydration des diarrhéiques par voie orale. (Oral rehydration for diarrhea patients).* Médecine d'Afrique Noire (Paris), 25(8-9), Aug-Sep 1978, 507-509. Fren. 13 refs.

Oral administration of a solution of potable water, glucose, salt, potassium chloride, and bicarbonate of soda is a simple, effective, and inexpensive method of rehydrating diarrhea victims. This paper describes the preparation of the solution, explains the basis for its effectiveness, and sets forward a prescription for its use. (HC-L)

4481 Clayton, P. *Psychiatric care in Pakistan: the good (what little there is), the bad, and the horrifying.* Nursing Mirror (London), 146(22), 1 Jun 1978, 22-24. Engl.

A British nurse spent 4 weeks in Pakistan studying the cultural background and the prevalence and treatment of psychiatric illnesses. She describes the psychiatric treatment facilities in Lahore, Rawalpindi, and Peshawar, which are run by some of Pakistan's 28 psychiatrists. The majority of mental hospitals are staffed mainly by untrained attendants assisted by the patients' relatives, who provide most of the food and drugs. The author attributes the high incidence of histrionic and neurotic behaviour to Pakistani child-rearing practices and is particularly critical of the treatment of postpartum depression. (DP-E)

4482 Corti, L., Corti, P. *Epidural anaesthesia in an up-country hospital.* Tropical Doctor (London), 8(3), Jul 1978, 119-122. Engl.

On the basis of their practical experience at a small mission hospital in Gulu, Uganda, the authors discuss the advantages of epidural anaesthesia. Safe, economical, and easily taught, this technique can be of great benefit to hospitals where staff, money, and time are in short supply. Recovery from epidural anaesthesia is much more rapid and less painful than from general anaesthesia, which reduces the number of staff required to monitor patients. Surgical interventions performed at the hospital are classified according to age, type of operation, and anaesthetic method used and the epidural procedure is described, including the dosage of anaesthetic solution required in various cases and possible complications. (FM)

4483 Développement et Santé, Paris. *Centre de rééducation de poliomyélite de Tenkodogo. (Tenkodogo poliomyelitis rehabilitation centre).*

Développement et Santé (Paris), (14), 1978, 15-17. Fren.

In 1968, the Peace Corps helped construct a rehabilitation and training centre for young poliomyelitis victims at Tenkodogo, Upper Volta. Workshops, a crafts centre, and a vaccination programme were added later. The centre is open 5 days a week and has resident facilities for foreign and post-operative patients. It offers: surgical services; rehabilitation services, including prostheses manufactured in an in-house workshop; and medicine and food supplements. A leather workshop trains patients in a trade and produces articles for sale. Future plans include the recruiting and training of indigenous therapists, the foundation of a national association for the physically handicapped, and the establishment of a tannery and sewing and embroidery classes. (RMB)

- 4484 Gasperi, A.E., Kityo, G.M., Kasujja, B.L.** *Organization of a multidisciplinary intensive care unit at Mulago Hospital, Kampala.* East African Medical Journal (Nairobi), 54(11), Nov 1977, 647-652. Engl. 11 refs.

The organization of an intensive care unit at Mulago Hospital, Kampala, Uganda, is described. Details of the design, equipment, and staffing are included. A committee composed of the heads of the various departments of the hospital is responsible for the general activities of the unit. The nursing staff consists of the senior nursing officer, 9 registered nurses, 6 student nurses, and auxiliary personnel. Interns from each department provide round-the-clock service and receive training at daily seminars. The types of cases treated in the unit are listed and suggestions are made for improvements in its operation. (FM)

- 4485 Khan, A.A., Maguire, M.J.** *Paediatric special care unit in a tropical hospital.* Medical Journal of Zambia (Lusaka), 11(5), Oct-Nov 1977, 143-146. Engl.

The performance of the special care unit in the pediatric wing of the University Teaching Hospital, Lusaka, Zambia, during its 1st year of operation is evaluated. The equipment, staff on hand, and admission criteria are briefly described, followed by detailed results of the patients treated that year. Pneumonia, measles, tetanus, and marasmus were the most common problems encountered. The unit has been particularly effective in dealing with hypothermia, upper airway obstruction, and lower respiratory infection. However, access to emergency laboratory facilities is poor, preventing effective intensive care. It is felt that standards in the unit will continue to improve with time, better equipment, and greater staff experience. (FM)

- 4486 Krishna Murthy, T.G.** *Instrumentation for health care in India: a realistic approach.* Medical Progress through Technology (Berlin), 5(1), 1977, 35-39. Engl.

An integrated approach is needed to make the best use of available resources when equipping Indian hospitals. Essential equipment is listed for rural and urban hospitals and nursing homes as a guide to planners. Depart-

mental needs are also itemized and instruments classified according to their usefulness as essential, useful, and optional. Since more than 70% of hospital equipment in India is idle due to operational problems, there is also a great need for improved training of technicians. Various government-supported projects have been important in the development of new technologies, including biosignal processing techniques, X-ray diagnosis, and computerized health information systems. (FM)

- 4487 Letton, A.H.** *Medicine in the People's Republic of China.* Journal of the Medical Association of Georgia (Atlanta, Ga.), 67(3), Mar 1978, 215-219. Engl.

A brief review of hospital services and disease control, especially in the area of cancer control, in the People's Republic of China is presented. Following an outline of the organization of health services, methods of treating cancer of the esophagus, liver, stomach, breast, cervix, and thyroid are described and the frequency of each type is indicated. Schistosomiasis control, the use of acupuncture as anaesthesia, and rehabilitation services, including prosthetics and the treatment of burns, are also examined. (FM)

- 4488 Maganu, E.T., Condon, M., Edmunds, A.W.** *System for drug administration.* Tropical Doctor (London), 8(3), Jul 1978, 177-179. Engl.

A new system for ordering and administering drugs now in use at the Princess Marina Hospital, Gaborone, Botswana, is described. Included is a sample drug sheet, which contains space for the doctor to note information and for nurses to record details of each administration. This enables personnel to see at a glance how regularly treatment has been given, saves time, and eliminates errors by having all drug information pertaining to a patient recorded in one place. Detailed instructions on the completion of the form by doctors and nurses are included. (FM)

- 4489 Metz, G., Dilawari, J., Kellock, T.D.** *Simple technique for naso-enteric feeding.* Lancet (London), 2, (8087), 26 Aug 1978, 454. Engl. 12 refs.

The authors describe a method for nasoenteric feeding with a thin, soft, flexible tube that is easy to use, causes no irritation, and does not need an electric pump flow control. After giving a detailed description of the tube and its installation, they discuss the advantages of nasoenteric feeding over hypoalimentation in gastrointestinal diseases. Their positive experience with the new device is related. (DP-E)

- 4490 Montgomery, T.A.** *Case for nurse-midwives.* American Journal of Obstetrics and Gynecology (St. Louis, Mo.), 105, 1 Oct 1969, 309-313. Engl.

Because of a chronic shortage of physicians in a rural county hospital in California (USA), many deliveries in the county hospital were medically unattended. This led to the development in July 1960 of a demonstration project in which qualified nurse-midwives provided maternity care services for all normal deliveries. The programme soon gained the enthusiastic support of both

physicians and patients. Neonatal mortality and prematurity rates dropped and service to expectant mothers and infants improved. The implications of the study's findings are discussed and statistical data are included. (DP-E)

4491 Novak, B. *Home nursing care program on an Indian reservation.* Public Health Reports (Rockville, Md.), 89(6), Nov-Dec 1974, 545-550. Engl. A home nursing project, designed to offer an alternative to hospitalization and to use the home as a therapeutic agent, was instituted on an Indian reservation in the USA in September 1973. Staffed by nurses, a social worker, a psychologist, a physical therapist, and community health aides, the programme concentrated on high-risk patients with long-term illnesses. Of 17 patients admitted in the 1st 6 months and subsequently discharged into this programme, only 1 required rehospitalization. Health care for these patients has improved and community involvement in health care has increased. Plans for expanding the project are being implemented. (DP-E)

4492 Povey, G. *Surgical uses for a safety razor.* Tropical Doctor (London), 8(4), Oct 1978, 204. Engl.

This article describes how a safety razor can be altered and utilized in the removal of split thicknesses of skin for grafts. This method has proved of value in the management of extensive burns in East Africa. An illustration of the altered razor is included. (HC-L)

4493 Sperotto, G., Carrazza, F.R., Marcondes, E. *Treatment of diarrheal dehydration.* American Journal of Clinical Nutrition (Bethesda, Md.), 30(9), Sep 1977, 1447-1456. Engl. 33 refs.

A method of treating diarrheal dehydration has been devised for use in developing countries. At the start of the treatment, a larger amount of fluid is infused than is usually recommended. The advantages of adding magnesium and phosphate supplements are examined. Faecal electrolyte composition was studied in a test group of 13 infants recovering from diarrheal dehydration and components of acid balance and generation were measured by the "net acid" balance technique. The method has been successfully used to treat large numbers of patients. Statistical data are included. (DP-E)

4494 Weber, R. *Morbidité et mortalité dans un hôpital de brousse en Afrique équatoriale. (Morbidity and mortality in a bush hospital in equatorial Africa).* Médecine d'Afrique Noire (Paris), 25(11), Nov 1978, 669-675. Fren.

The author presents data concerning morbidity and mortality in a small jungle hospital in Cameroon and discusses the climatic, psychological, economic, and logistic factors involved. The four most common diseases in the area are intestinal parasitic diseases, loiasis, malaria, and gonorrhea, which together account for 56% of the consultations. The high mortality rate from pneumonia is due largely to delays in transporting patients to the

hospital. Poor communication and transportation facilities, especially during the rainy season, as well as the vastness of the region to be served and the difficulty in recruiting qualified personnel, will prevent any significant improvement in health care. (FM)

4495 WHO, Geneva. *Laboratory techniques for rapid diagnosis of viral infections: a memorandum.* Bulletin of the World Health Organization (Geneva), 55(1), 1977, 33-37. Engl. 13 refs. Also published in French and Russian.

This memorandum evaluates rapid laboratory techniques for the diagnosis of viral infections with a view to their use in developing countries. These techniques comprise the detection of viral antigens by immunofluorescence and immunoperoxidase techniques and methods of viral antibody and antigen determination by the enzyme immuno-assay technique. A number of general and specific recommendations are made; these cover training programmes, further research, and the preparation of a practical manual on the techniques described here. (Modified journal abstract.)

4496 Wierman, J.A., Snyder, C.A. *Feasibility of using the fiberoptic gastroscope in a small hospital in a developing country.* Tropical Doctor (London), 8(3), Jul 1978, 110-111. Engl.

On the basis of their experience in Rwanda, the authors describe the advantages of using a fiberoptic gastroscope for studying and diagnosing peptic ulcer disease in a developing country. Much less expensive than an X-ray unit equipped for barium studies, the gastroscope is completely and easily portable. The additional suction machine and power source required are available in most small hospitals. With minimal training, any physician can use the gastroscope to do up to three studies per hour. The authors consider it a very useful tool for any developing country with limited resources and a high incidence of peptic ulcer disease. (FM)

III.2 Rural Outpatient Care

See also: 4226, 4266, 4281, 4357, 4483, 4489, 4491, 4495, 4555, 4602, 4606, 4620, 4627, 4661, 4662, 4666, 4676, 4679, 4703, 4715, 4761, 4773, 4864

4497 Abrams, H.K. *Together with farmers: social and rural medicine in Japan.* Comparative Medicine East and West (New York), 6(1), 1978, 23-31. Engl. 14 refs.

The Saku Central Hospital in Nagano prefecture, Japan, divides its activities into inpatient care, outpatient services, and public health and hygiene outside the hospital. One of 118 rural hospitals sponsored by the agricultural cooperative movement, it provides health care to about 200 000 people. Its outreach programme is based on the need to consider health in the total social context where an improved standard of living, social security system, and wage structure are equally important. Raising the health consciousness of the farmers is also part of their programme in an area that is dominated by a feudalistic stoicism. (FM)

- 4498 Adeyokunnu, A.A., Topley, E.** *Sickle cell anaemia: diagnosis and care in a Nigerian health centre.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(5), 1977, 416-420. Engl.

A study of 156 cases of sickle cell anaemia diagnosed at Igbo-Ora (Nigeria) from 1962-1975 is described. In 1971, haemoglobin electrophoresis was introduced for all suspected cases and the positive diagnoses rose from 9-154 in 4 years. The new cases diagnosed within 1 year of birth rose from zero in 1971 to 10 in 1974 (25% of all expected cases). The percentage of cases diagnosed within 1 year of detecting anaemia rose from 0-94%. It is concluded that this technique is of great value in improving early diagnosis in peripheral clinics; other ways of improving early diagnosis are discussed. (Modified journal abstract.)

- 4499 African Medical and Research Foundation, Nairobi.** *Anthrax.* AFYA (Nairobi), 12, Mar-Apr 1978, 41-44. Engl.

Anthrax, an ancient disease of animals, can be transmitted to man by contact, inhalation, or consumption of the skin or flesh of infected livestock. The *Bacillus anthracis* and its mode of transmission are described. Symptoms in animals are mentioned; clinical findings in humans include the characteristic "malignant pustule" with oedema, gastroenteritis, and meningitis. The disease can be diagnosed by culturing the bacilli and treated with 5-7 day courses of penicillin, streptomycin, or another antibiotic. Infected animal carcasses should be burnt or buried in quicklime. Both humans and animals can be immunized. (RMB)

- 4500 Antia, N.H.** *Alternatives to health care system.* In Alternative Approaches to Health Care, New Delhi, Indian Council of Medical Research, 1976, 102-113. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

In 1973, a rural health research project was begun in North Alibad and Uran (India) to enlist the support of the people for a community-based health programme, develop a model rural health scheme that could be duplicated in other parts of the country, evolve an efficient health care delivery system with emphasis on preventive medicine, and undertake a series of socioeconomic programmes to improve the standard of living. The 1st phase of the project consisted of conducting surveys and enlisting community aid, the 2nd and 3rd of establishing a primary health centre and training and deploying the necessary personnel (village health workers, auxiliary nurse-midwives, and a physician). These workers are evaluated and problems of community participation and organization discussed. (RMB)

- 4501 Arole, R.S.** *Comprehensive Rural Health Project, Jamkhed.* In Alternative Approaches to Health Care, New Delhi, Indian Council of Medical Research, 1976, 95-101. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

A community health project in Jamkhed (India) sponsors a 30-bed health centre and village clinics for some 40 000 people in 30 rural villages. The villages contribute to the project by constructing and maintaining a building for the clinic, keeping roads open, and providing local women to be trained as village health workers (VHWs). The VHWs are supervised by visiting health teams. The project offers nutrition and immunization programmes for children, antenatal and postpartum care and domiciliary or hospital delivery services, family planning, treatment for chronic illnesses and eye diseases, general public health measures, and curative diagnostic facilities. Statistical data are contained in two appendices. (RMB)

- 4502 Bachan, N.K.** *Community health project.* In Alternative Approaches to Health Care, New Delhi, Indian Council of Medical Research, 1976, 67-79. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

A training programme for village health workers (VHWs) has been initiated at the Harriet Benson Memorial Hospital, Lalitpur, India. In addition to eventually training 1 VHW:1 000 villagers, the hospital also provides weekly maternal child health and treatment clinics and receives cases the VHWs refer. VHWs concentrate on child mortality and malnutrition, family planning, safe childbirth, health education, and the diagnosis and referral of patients with tuberculosis, leprosy, and eye diseases. The organization, financing, staffing, etc., of the training programme and the clinics are examined. Some of the cultural difficulties faced by the VHWs, such as caste conflicts and taboos, are discussed. (RMB)

- 4503 Diallo, J.S.** *Traitement chirurgical sans hospitalisation de la cataracte sénile au Sénégal. (Surgical treatment of senile cataract without hospitalization in Senegal).* Advances in Ophthalmology (Basel, Switzerland), 36, 1978, 143-148. Fren.

Because lack of hospital facilities in Senegal prevents many cataract victims from recovering their sight, an ophthalmic clinic in Dakar has developed a procedure for performing the operation on an outpatient basis. This document describes the procedure and the incidence of complications occurring during 720 cases of its application by experienced (more than 25 years practice), confirmed (6-10 years practice), and novice (less than 6 years practice) operators. The outpatient procedure is concluded to be as safe as hospital procedure only in the hands of experienced operators. Statistical data are included. (HC-L)

- 4504 Fuerst, M.L.** *National Health Service Corps.* Medical World News (New York), 19(23), 13 Nov 1978, 98-99, 101, 104-105, 108-112. Engl.

The National Health Service Corps (NHSC) was established in 1972 to provide care to people living in desig-

nated shortage areas of the USA. The Corps is staffed by volunteer physicians or those who have attended medical school on an NHSC scholarship. Communities that qualify as shortage areas must set up a nonprofit corporation to equip and run the business end of the practice, although only about 20% have so far become self-supporting. Because this subsidized service is expensive, other solutions to maldistribution are suggested, including physician extenders such as nurse practitioners and physician's assistants, state-controlled services, and private enterprises. Interviews with Corps physicians are included. (DP-E)

- 4505 George, M.V.** *Community approach to health care services by popularising cooperative rural dispensaries.* In *Alternative Approaches to Health Care*, New Delhi, Indian Council of Medical Research, 1976, 132-137. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

The cooperative rural dispensary scheme was implemented in Kerala state, India, to provide the basis for a self-help rural health care programme and to offer employment to jobless medical personnel. Each self-contained dispensary offers both curative and preventive services and contains an 8-bed ward, a laboratory, and a pharmacy. The dispensaries are sponsored by local cooperatives. The dispensary staff comprises a physician, a nurse-midwife, a pharmacist, a laboratory technician, a manager-accountant, and two attenders. Problems faced by this system include undesirable working conditions and lack of supervision. (RMB)

- 4506 Giacalone, J.J., Hudson, J.I.** *Health status assessment system for a rural Navajo population.* *Medical Care* (Philadelphia, Pa.), 13(9), Sep 1975, 722-735. Engl.

The 1st year's operation of an ambulatory patient monitoring system for a rural Navajo population in the USA is analyzed. Adapted to a pre-existing computer-based mechanism, the system was designed to assess individual health status and implement patient surveillance for follow-up and reevaluation. The data collected allow for a continuous reassessment of community needs and provide a technique for monitoring the effectiveness of the health care delivery system in meeting those needs. Statistical data are included. (DP-E)

- 4507 Goldstein, M.A.** *Pediatric practice in a rural southwestern community health clinic: some personal experiences and comments.* *Clinical Pediatrics* (Philadelphia, Pa.), 17(4), Apr 1978, 376-379. Engl.

A survey of pediatric patients seen at a public health clinic in New Mexico, USA, from August 1973-April 1974 reveals the special needs of rural areas. Prenatal care and birth control counselling were more frequent than in comparable urban clinics. Iron deficiency anaemia and malnutrition were also more common. As the clinic may often be the only medical facility available in such areas, pediatricians must be prepared to assume

new responsibilities and to revise upward the age limit for accepting new patients. It is also suggested that pediatric nurse practitioners be licensed to prescribe medication and perform minor surgery. (FM)

- 4508 Howard, D., Ashley, D.H.** *Developing primary health care for rural areas in North Carolina.* Lexington, Ky., Council of State Governments, Innovation Transfer, New Approaches by the State, RM-620, Jun 1977. 40p. Engl.

North Carolina (USA) has designed and implemented a programme to help rural communities construct and staff primary care clinics. The clinics are financed by the state and the community in a ratio of 5:1. They are staffed by a family nurse practitioner or physician's assistant with 1 year of special training. Maintenance funds are available from the state on a 3-year basis, but of the clinics built since 1974, two are already self-supporting. This document describes the legal, financial, administrative, and training aspects of the programme and contains advice for implementing it in other parts of the country. (HC-L)

- 4509 Ibrahim, H.H., Younis, Y.O.** *Some aspects of psychiatry in the Sudan.* *Tropical Doctor* (London), 8(3), Jul 1978, 164-168, 184. Engl.

Psychiatric problems and their treatment in the Sudan are described. As in most other countries, the most common psychic disorders are schizophrenia, depression, and anxiety. Although there is no psychiatric syndrome peculiar to the Sudan, local cultural and socioeconomic factors may modify symptoms and toxic factors, nutritional deficiencies, and infection typical of a developing country play an important role. Most patients are treated on an outpatient basis and drugs are used with a high rate of success. Although modern facilities exist throughout the country, except in southern Sudan, and their utilization rate is steadily increasing, some patients still prefer traditional and religious healers. (FM)

- 4510 Klein, D.A.** *Purdue University, Health Services Research and Training Program, Department of Sociology, West Lafayette, Ind. Health services data system; 2: management uses of health services data.* Springfield, Va., National Technical Information Service, May 1973. 82p. Engl.

This volume serves as an introduction and guide to the use and analysis of health services data. Three data components of a community health service data system as well as US census data are described and the general management applications of component-specific data are discussed. The three basic data components considered are a family interview survey, a uniform hospital discharge abstracting system, and an ambulatory care data system. The management utility of individual data items from the component data sets is also examined. (Modified journal abstract.)

- 4511 Mahadevan, B.** *Service responsibility of a department of community medicine through a health co-operative.* In *Alternative Approaches to*

Health Care, New Delhi, Indian Council of Medical Research, 1976, 138-148. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

The Mallur (India) milk cooperative recently expanded its services to include a comprehensive health care programme for 304 member families; the village health centre has also been adopted as a training site for interns from St. John's Medical College where the programme is held. The programme provides an outpatient clinic, maternal child health services, school health, immunization programmes, family planning, tuberculosis and leprosy treatment, specialist camps, and hospital referrals. It also sponsors community services such as water chlorination, latrine construction, and health and nutrition education. Financial details are included. (RMB)

- 4512 McArthur, J.** *Rapid diagnosis of cholera.* Journal of Tropical Medicine and Hygiene (London), 80(5), May 1977, 99-101. Engl. 15 refs.

The diagnosis of cholera has in the past depended on laboratory cultural reactions that take about 18-24 hours and require a well-equipped laboratory with an experienced staff. This article describes a miniature microscope with a built-in battery-operated lamp measuring 4x3.25x2 inches and weighing .50 kg that can be easily transported and used in one hand. The microscope is acute enough to pick up the characteristic swarming movement of *Vibrio cholerae* in a patient's stool sample and, if this movement ceases after the addition of O Group I antiserum, a diagnosis of cholera can be made. Detailed instructions for use of the microscope are given and its value is discussed. (RMB)

- 4513 Moss, V.A.** *Padhar Hospital community health project.* Saving Health (London), 17(4), Dec 1978, 10-12. Engl.

See also entry 4514.

The Padhar Hospital community project (India) started with the development of a well-drilling project in 1970 to improve water supplies. In 1975, a team was trained to do surveys and health education work in local villages and provide treatment for common conditions. The team has also started a 2-week programme to train local women as village health workers who will provide health education and maternal child health care. In addition, the team works at the hospital in the maternal and pediatric wards and holds eye camps, family planning camps, conferences for farmers, etc. (DP-E)

- 4514 Moss, V.A.** *Padhar Hospital community health project.* In Alternative Approaches to Health Care, New Delhi, Indian Council of Medical Research, 1976, 80-86. Engl.
Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.
For complete document see entry 4254; see also entry 4513.

The Padhar Hospital (India) community health project aims to provide maternal child health services and treatment to patients referred by the community health team,

which visits some 82 local Gond villages to give health education, care for minor illnesses, distribute vitamin A supplements, provide school health services, and supervise village health workers. The basic team is composed of a physician, a nurse, a laboratory technician and driver, a health educator, and an auxiliary nurse-midwife. The difficulties, mainly cultural, faced by the health team are examined. (RMB)

- 4515 Nchinda, T.C.** *Propharmacy as a means of meeting chronic drug shortages in rural health centres in rural African communities.* Tropical Doctor (London), 8(4), Oct 1978, 226-228. Engl.

The propharmacy concept was developed in Cameroon to compensate for chronic drug shortages in rural health centres. A propharmacy is a small, government-instituted, council-financed drug store generally located near a health centre in a town where no private pharmacy exists. Run by a nurse or pharmacy assistant and supervised by the rural health medical officer, the propharmacy stocks a limited range of drugs that it buys in bulk from wholesalers free of customs duties and taxes and sells at low cost. Prerequisites to the successful implementation of a propharmacy are good administrative management and absolute honesty on the part of those who run and supervise it; the concept functions well in North-West Province, where there is a centralized system of supervision, control, and accounting. A sample of some of the drugs stocked by propharmacies and their costs are set forward. (HC-L)

- 4516 Pugh, A.O.** *Aspects of rural health; IV: better rural clinic services.* Central African Journal of Medicine (Salisbury), 24(5), May 1978, 98-100. Engl.

See also entries 3580 (volume 6), 4230, 4266, 4372, 4453, and 4454.

The 1st step toward improving the services of a rural clinic is an analysis of the population and its problems, such as poor sanitation and water supplies. Preventive measures should then be instituted where possible and information on better health practices disseminated. There should be sufficient staff to make home visits and the clinic must also have enough space, clean water, and good disposal facilities. For practical and psychological reasons, local communities should be encouraged to run their own clinics. Proper communication and transportation equipment are also necessary. (DP-E)

- 4517 Rampen, F.** *Dermatological clinic in a leprosy control scheme: 10 years' experience in Malawi.* Leprosy Review (London), 49(2), Jun 1978, 141-147. Engl.

A few years after starting a leprosy control programme in Malawi, it became clear that increasing numbers of patients with general dermatological conditions were being referred to the leprologist for diagnosis and treatment. Weekly clinics were consequently established; they handled over 9 000 patients between 1968-1975. This paper describes the main conditions diagnosed, many of them curable. The clinics were also a valuable source of new cases of leprosy. The role of the general

skin clinic within a leprosy control programme in a country with 5 million people and no dermatologist may therefore be of considerable diagnostic, therapeutic, and research value. Statistical data are included. (Modified journal abstract.)

- 4518 Rao, A.K.** *Community health care.* In *Alternative Approaches to Health Care*, New Delhi, Indian Council of Medical Research, 1976, 127-131. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

To improve physician training and expand community services, the Kasturba Medical College (India) started an extension service that includes medicare, camps, school health, and rural maternity and child welfare homes. Medicare is a low-cost comprehensive medical and dental health scheme; free coverage is given to poor families if the father practices birth control and donates blood twice a year. Ophthalmic and dental camps are held frequently and occasional camps cover medicine, surgery, obstetrics and gynaecology, and ear, nose, and throat care as well. School health comprises examining students for dental, sight, and hearing problems. Future plans include expanded health education, pest control, and family planning programmes. (RMB)

- 4519 Sanjivi, K.S.** *Mini health centres project of the Voluntary Health Services medical centre, Madras.* In *Alternative Approaches to Health Care*, New Delhi, Indian Council of Medical Research, 1976, 149-160. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

The Voluntary Health Service (VHS) has established a number of family health projects in Madras, India; these include the establishment of mini health centres (small health centres) that are described in full in this article. Each community-sponsored centre is a permanent facility serving some 1 000 families or 5 000 individuals. The staff includes a part-time physician and an auxiliary nurse-midwife. The experiences and finances of 16 centres over a period of 2 years are examined. Appendices contain a diagram of the organization of local health care facilities and a questionnaire. (RMB)

- 4520 Sims, P.** *Ante-natal card for developing countries.* *Tropical Doctor* (London), 8(3), Jul 1978, 137-140. Engl.

A new medical record card designed for use in antenatal clinics in developing countries can be largely completed by a clerk with 1-2 years of secondary schooling. It provides information useful to the doctor or midwife at the clinic and during delivery and postpartum care, such as the obstetric history of the patient, reasons for special care, previous diseases, tests administered, uterine growth measurements, probable delivery date, and blood pressure. The usefulness of the card is discussed, with some criticism of its complicated nature and suggestions for its improvement. (FM)

- 4521 Thylefors, B.** *Vision screening of illiterate populations.* *Bulletin of the World Health Organization* (Geneva), 55(1), 1977, 115-119. Engl. 11 refs. Also published in French and Russian.

Assessing the amount of reduced vision in a population is an important public health matter, especially in areas where blinding diseases are endemic. Testing visual acuity is, however, a complex problem when a major part of the population is illiterate. The best-known test of vision is the E-test, but this produces the problem of untestability in illiterate populations. The introduction of the Sjogren hand-test as an alternative to the E-test for vision screening of unselected illiterate populations in West Africa resulted in a highly significant reduction of untestability. For certain vision levels it is possible to correlate the results of the hand-test directly with those of the E-test. Statistical data are included. (Modified journal abstract.)

III.3 Mobile Units and Services

See also: 4391, 4518, 4626.

- 4522 Atangana, S., Guyer, B.** *Plan to protect children from disease; the immunization programme in Yaounde.* *WHO Chronicle* (Geneva), 31(12), Dec 1977, 499-505. Engl.

Also published in French, Russian, and Spanish.

In 1975, epidemiological data revealed that current immunization programmes were not protecting the population of Yaounde, Cameroon, against infectious diseases, especially measles and poliomyelitis. A multiple-antigen immunization programme involving continuous, monthly visits by a mobile vaccination team to 11 dispensaries throughout the city was therefore devised. The programme focused on maintenance rather than mass campaigns and had a built-in evaluation component. This paper describes its objectives, organization, personnel, immunization schedule, and immunization records and some of the problems encountered in its implementation. (HC-L)

- 4523 Giles, H.R., Isaman, J., Moore, W.J., Christian, C.D.** *Arizona high risk maternal transport system: an initial view.* *American Journal of Obstetrics and Gynecology* (St. Louis, Mo.), 128(4), 15 Jun 1977, 400-407. Engl.

Data on age, ethnic background, pregnancy history, medical problems, and transport logistics were collected from the 1st 357 high-risk maternity patients transported to the Arizona Medical Center (USA) from other facilities. The perinatal outcome in these cases indicates that the maternal transport programme is effective in providing comprehensive, high-quality maternal child health services and is cheaper and less complicated than neonatal transport. Statistical data are included. Three physicians comment briefly on this programme in closing. (DP-E)

- 4524 Gish, O., Walker, G.** *Mobile health services.* London, Tri-Med Books, 1977. 214p. Engl.

This book is the result of an extensive project, funded by

the UK Ministry of Overseas Development, to assess the relative value of all forms of mobility within the health services (with special reference to land vehicles and aircraft) and the use of radio communications to increase the effective coverage of primary health care for the rural populations of developing countries. Specific recommendations for both health workers and patients are made regarding the potential use of aircraft and other forms of transport, including the cost. Field work was carried out in Botswana. Statistical data are included. (DP-E)

- 4525 Heymann, D.L., Djogdom, P., Guyer, B., Nakano, J., Durand, B.** *Programme élargi de vaccination de Yaoundé (République Unie du Cameroun); évaluation après deux ans d'activités. (Expanded vaccination programme in Yaounde (United Republic of Cameroon): evaluation after two years of operation).* Médecine d'Afrique Noire (Paris), 25(11), Nov 1978, 625-632. Fren. 10 refs.

A mobile vaccination unit for children has been operating in Yaounde, Cameroon, since October 1975. The seven staff members visit 16 centres in the city once a month and are responsible for the surveillance of measles and poliomyelitis cases, the administration of vaccines, and a yearly evaluation of vaccination coverage. Since the beginning of the programme, the percentage of children who have been vaccinated at least once has continually risen. By August 1977, the unit had reached about 54% of all children aged less than 36 months. The prevalence of measles and paralysis had also diminished. Statistical data are included. (Modified journal abstract).

- 4526 Lockerby, F.K.** *Outreach program in Brazil.* Hospitals (Chicago, Ill.), 51(19), 1 Oct 1977, 67-71. Engl.

An outreach programme in Brazil, run by the Seventh Day Adventist Church (USA), uses boats to provide basic medical care to isolated villages along the Amazon. A flagship and four smaller launches are staffed by missionaries with paramedical training. The flagship is equipped for medical and dental examinations and treatment. Malnutrition, malaria, and parasites are the most common problems treated. Serious cases are flown by amphibious aircraft to a nearby hospital. A new phase of the programme will operate busses on the Transamazonia Highway to reach other villages. (FM)

- 4527 MacMahon, A.G.** *Four years' experience with South Africa's first mobile accident unit.* South African Medical Journal (Capetown), 53(9), 4 Mar 1978, 333-337. Engl.

After 4 years of service, an evaluation of a mobile accident unit in South Africa was carried out. A specially-equipped vehicle, manned by doctors on a voluntary basis, provides 24 hour assistance to ambulance personnel at the scene of accidents. Motor vehicle accidents are the most frequent and details are given on the number, type of call, and treatment offered. Case studies show the diversity of emergencies handled by the unit and the type of services provided. The author stresses the importance

of the enthusiasm of the volunteers in the success of the programme. (FM)

- 4528 Reinecke, R.D., Coleman, N., Kelly, J.** *Eye mobile screening unit.* Sight Saving Review (New York), 46(4), Winter 1976-1977, 147-153. Engl.

Evaluation of a pilot project involving a mobile eye unit in upper New York state, USA, showed that screening of major eye problems can be carried out by technicians and does not require the presence of professional ophthalmologists. Designed to screen high-risk patients and refer them for professional assistance, the unit also provided rehabilitation services where possible and continuing education in the area of eye diseases. Results over 3 years were generally positive and it is hoped that the programme will be expanded to include large-scale screening of those without advanced eye problems. (FM)

- 4529 Sherman, D.J., Limmer, A.N.** *Mantle of safety: the 50th year of the Royal Flying Doctor Service.* British Medical Journal (London), 2(6134), 5 Aug 1978, 407-409. Engl.

This paper reflects on the development, achievements, and future plans of the Royal Flying Doctor Service on its 50th birthday. The Service covers 2 million miles of Australian territory and depends on the federal and state governments for funding. (DP-E)

III.4 Community Health Education

See also: 4372, 4440, 4513, 4615, 4616, 4619, 4622, 4623, 4633, 4642, 4643, 4656, 4837, 4848, 4863, 4876.

- 4530 Adeniyi, J.D., Brieger, W.R.** *Developing a curriculum for an MPH degree in health education for Africa: how suitable are the US models?* International Journal of Health Education (Geneva), 2, Jan-Mar 1978, Suppl., 2-24. Engl.

In 1975, a Master of Public Health programme in health education was established at the University of Ibadan (Nigeria). The 1st part of this paper on the development of the curriculum deals with some theoretical concepts in health education. Part 2 discusses curriculum models in the USA while part 3 assesses the feasibility of the instructional and the experimental models in the African setting. Part 4 describes the Ibadan curriculum, which has evolved in the direction of practical field experience, and part 5 gives a preliminary evaluation. An appendix fully outlines the formalized version of the curriculum. (DP-E)

- 4531 Berthet, E.** *New roles for teachers.* World Health (Geneva), May 1979, 23-27. Engl.

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

Two seminars on the theme "health, nutrition and development" were held at Ouagadougou (Upper Volta) in 1976-1977 to encourage the inclusion of health in the training of administrators, planners, teachers, and senior ministry officials. In Benin (West Africa) from 1976-1978, information sessions were held for teachers, doctors, and nurses to analyze the health problems of school-

age children and to set up a practical health education programme. A manual on schoolchildren's health was drawn up and distributed to all the country's schools; the main issues covered are the school's role in promoting and protecting health, growth and development of the child, diet and nutrition, accident prevention and basic first aid, the environment, and preparation for family life. (AF)

- 4532 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(3), 1978, 95-103. Engl. 14 refs.

Also published in Portuguese in *Boletín de la Oficina Sanitaria Panamericana*.

This article describes community participation in a comprehensive 8-year health programme at Porto Nacional, Brazil. The programme began with a campaign to eradicate vermin and construct latrines and cesspools and was later extended to include a nutrition and child health centre, a housing project, and health education activities. The authors discuss various techniques employed to encourage community participation, indicate methods used to resolve low-key disputes in a positive manner, describe the major contributions made by community participation in this programme, and present a number of conclusions considered applicable to other communities in this part of Brazil. (Modified journal abstract.)

- 4533 Colle, R.D.** *Guatemala Project: the traditional laundering place as a non-formal health education setting.* Convergence (Fribourg, Switzerland), 10(2), 1977, 32-40. Engl.

Also published in French; see also entries 3188 (volume 5) and 3837 (volume 6).

The author describes the use of a modern health education method, tape-recorded cassettes operated by a local teenager, at a traditional gathering place for rural Guatemalan women, the local laundering place or *pila*. The reasons for choosing this method and place are examined and the characteristics of the recordings (dramatization, authority, brevity, semisequential flow, etc.) are discussed. Interviews with local women indicated that they had easily absorbed messages about health, animal husbandry, and nutrition. The success of the project emphasizes the need to seek natural settings for nonformal education programmes, use simple technology, and involve local people in gathering, creating, and packaging educational materials. (RMB)

- 4534 Craft, M.** *Motivation model for preventive dental behaviour.* International Journal of Health Education (Geneva), 21(3), Jul-Sep 1978, 194-204. Engl. 42 refs.

General dental practitioners working in six towns in the UK filled out questionnaires designed to obtain data on their attitudes to preventive dentistry and behavioural modification. The extent to which dentists serve as models of ideal preventive behaviour within their own families is also assessed. Generally, dentists reported that the long-term dental health of their patients was equally as

important as that of their own children. However, analysis of motivational methods used showed a greater emphasis on techniques involving active participation in dentists' families. This supports the findings that children of dentists tend to have better dental health and suggests that changes are needed in attitudes to preventive dental care. (FM)

- 4535 de Sagasti, H.E.** *Social motivation approach for rural health improvement.* Ann Arbor, Mich., Academy for Educational Development, Apr 1976. 71p. Engl.

Available from A.I.D. R and D Report Distribution Center, 300 North Zeeb Road, Ann Arbor, Mich. 48106.

A model for improving rural health care in developing countries by using educational radio and community organization has been implemented in Costa Rica, but most model components could be transferred to similar projects in other countries. Key components used in developing this model are a low cost, resources allocated to benefit the rural majority, independence of health personnel, an emphasis on prevention and self-reliance, and reconciliation of central and local decision-making and responsibility. This document covers the financing, utilization of project resources, environmental situations in which the model is to be implemented, similar projects in other countries, and issues of feasibility. (RMB)

- 4536 Guy, C.J.** *Health education in schools.* Health Education Journal (London), 35(3), 1976, 214-220. Engl.

The author advocates the incorporation of health education into the British elementary school curriculum and the in-service training of elementary school teachers. He stresses the relationship between health education and moral education, with special emphasis on sex education. Many courses, including science, home economics, mathematics, etc., offer opportunities for teachers to cover different topics in health education and the author prefers that this be done by regular staff members rather than by experts brought in from outside. (DP-E)

- 4537 Hilton, D.** *Teaching through storytelling.* Salubritas (Washington, D.C.), 2(3), Jul 1978, 4-5. Engl.

A pilot project in Lardin Gabas, northern Nigeria, is proving effective in promoting rural health through storytelling. A male and female village health trainee are chosen by each village and undergo a 3-month training programme in the art of telling stories through drama, songs, and riddles. They also receive some clinical instruction and are trained in the use of simple medicines. Basic health education objectives such as hygiene, family planning, and immunization are combined with images from local cultural and traditional beliefs to produce effective messages with which the villagers can identify. (FM)

- 4538 Institute of Child Health, London.** *CHILD-to-Child Programme Newsletter.* London, Institute of Child Health. Engl.

Also published in French.

CHILD-to-Child is an international programme designed to teach and encourage schoolchildren to concern themselves with the health of younger siblings. Simple preventive and curative activities appropriate to the local situation are demonstrated and taught to the children in school so that they can pass them on in the family or village environment. It is hoped that initiative and encouragement will come from government and other official sources. This newsletter records some of the projects proposed or implemented in different parts of the world. Readers' contributions are solicited. (RMB)

- 4539 Kaplun, A. ed(s).** International Union of Health Education, Geneva. *International Journal of Health Education; special issue on the theme of the IXth International Conference on Health Education*. Geneva, International Union of Health Education, 1977. 72p. Engl. Refs.

Ninth International Conference on Health Education, Ottawa, Canada, 29 Aug-3 Sep 1976.

Individual articles have been abstracted separately under entries 4278, 4295, 4309, and 4329; also published in French and German.

These papers on the theme of health education, health policy, and the dynamics of development cover community intervention and social participation in health programmes, self-care systems, environmental health education, behaviour modification techniques, interaction between consumers and providers of health services, the role of health administrators and politicians, the participation of women, outpatient care, and effective communication techniques. The papers help to identify three major health issues: the relation of health care systems to national needs and resources and its effect on policy, the utilization of health care workers, and future trends in health education. (FM)

- 4540 Khassis, U., Tillman, I.** *Integration of the health education component in the opening of a new regional hospital in Jerusalem*. International Journal of Health Education (Geneva), 21(2), Apr-Jun 1978, 116-119. Engl. 21 refs.

Also published in French, German, and Spanish.

In order to encompass a scope of work as broad as possible, it was agreed that the health functions of a new Jerusalem hospital would include communication and public relations with an educational content, education for staff and patients, collection of feedback data and of reactions for assessment and evaluation, and efforts aimed at conveying the interests of the providers to the consumers and at ensuring response to the outreach services. Examples of health education projects that were implemented by the hospital include letters and advertisements to neighbourhood families, seminars in community clinics, a programme for the kitchen and cleaning staff, etc. (DP-E)

- 4541 Norman, A.J.** *Family planning with Third-World males*. Health and Social Work (Washington, D.C.), 2(3), Aug 1977, 138-157. Engl. 9 refs. A pilot project conducted in Los Angeles, USA, was

aimed at involving young males from minority groups in family planning programmes. More than 2 000 males aged 12-25 years were interviewed concerning attitudes toward and knowledge of birth control methods and sexual activity. Workshops and seminars led by trained counsellors encouraged the participants to take responsibility for their actions and to recognize the implications of parenthood. Data collected showed that this group was active sexually without adequate knowledge and at an earlier age than in the past. The project demonstrated the need for such a service-oriented family planning programme directed at young, Third World males. (FM)

- 4542 Pan American Health Organization, Washington, D.C.** *Jamaica launches nutrition education campaign*. Bulletin of the Pan American Health Organization (Washington, D.C.), 12(2), 1978, 180-181. Engl.

A nutrition education programme, developed by a multidisciplinary review committee that includes representatives of various government departments and agencies, was launched in Jamaica in January 1978. Using community groups and the mass media, the campaign is aimed at the promotion of breast-feeding, family planning, consumption of good food, and the use of maternal child health services. The campaign's major goals are improvement of prenatal and postnatal care, reduction of malnutrition in young children, and self-sufficiency in food production. (DP-E)

- 4543 Pugh, N. ed(s).** African-American Scholars Council, Washington, D.C. USA, Agency for International Development, Department of State. *International health education*. Peoria, Ill., Peoria School of Medicine, Jan 1977. 50p. Engl. Working Conference on International Health Education, Washington, D.C., 8-9 Oct 1976.

Universities in the USA, Ghana, Kenya, Nigeria, Tanzania, and the West Indies sent representatives to a 1976 conference that examined the possibilities for sharing the research carried on in both US and African universities to bring about improvements in diagnosis, treatment, and training. It was resolved that the international community should establish or support one or more African centres for training and research in community health education, help national authorities design and evaluate community health education projects, and help integrate health education into health manpower training programmes. These proceedings contain a list of participants and the conference agenda and papers. (DP-E)

- 4544 Ram, E.R., Holkar, V.M.** *Community kitchen in the Kamanves slum, India*. Assignment Children (Geneva), 43, Jul-Sep 1978, 47-56. Engl.

A self-help project in the Kamanves slum in Miraj, India, is based on the community kitchen concept. Operated by the mothers, the kitchen provides a morning meal for preschool children and an evening meal for older children, with supplements for those suffering from malnutrition. Height and weight charts are kept and elementa-

ry health care and hygiene are included in the project. With expansion, the kitchen has become a family-oriented community centre sponsoring vocational training courses in various crafts, recreational and cultural activities, and a health education programme. It also provides financial aid for schooling and operates a cooperative to finance small enterprises. (FM)

- 4545 Richman, L.A., Urban, D.** *Health education through television: some theoretical applications.* International Journal of Health Education (Geneva), 21(1), Jan-Mar 1978, 46-52. Engl. 23 refs.

Public television has not been effective in bringing about behavioural change, but it has been useful in arousing interest and informing the public about health matters. In this role, television may act as a suitable component of a larger, overall health programme that includes reinforcement of information through various sources and leads to face-to-face interactions at some point. Research suggests that television is most effective if: the programmes are simple, yet interesting; the important points are emphasized through repetition; a simple way to take further health action is provided; and the programme content follows the implications of the health belief model. (Modified journal abstract.)

- 4546 Shattuck, D.** Canada, Department of Health and Welfare. *Mass media campaigns and health promotion.* Health Education (Ottawa), 17(2), Jun 1978, 4-5. Engl.
Also published in French.

The effectiveness of mass media campaigns in Canada to promote health and to change attitudes and lifestyles is discussed. Using the Saskatchewan Alcohol Education Programme as an example, the author describes some of the difficulties as well as the potential of health promotion. Long-term commitment to such campaigns is seen

as the key to their success, followed by high-quality advertising techniques comparable to those in the commercial sector. Smoking, nutrition, and physical activity are some of the other areas benefiting from mass media campaigns in Saskatchewan. (FM)

- 4547 Valdecanas, O.C.** *Comic insert: popular medium for nutrition information.* Philippine Journal of Nutrition (Manila), 29(3), Jul-Sep 1976. Engl. 9 refs.

A Philippine study of the use of the comic insert as a vehicle for food and nutrition information indicated that comic magazines are read by people of all educational levels. Selected readers of a popular comic magazine were mailed a 7-item questionnaire to ascertain their reactions to a 1-page article on malnutrition that appeared in the July 5, 1973, issue. The responses to the questionnaire, mostly from married women aged 20-30 years, suggested that interest in nutrition could be aroused through this medium, but because comic magazines lack seriousness, the information they carry must be validated by a responsible agency. Statistical data are included. (DP-E)

- 4548 Van Dokkum, W.** *Application of magic as an audio-visual aid in nutrition education.* Cajanus (Kingston, Jamaica), 11(4), 1978, 235-241. Engl.

After outlining the essential ingredients of a nutrition education message, the author points out several ways in which magic can be used in mass campaigns, especially with audience participation. First, magic can be used to attract attention and gather an audience. Magic can also transmit a nutrition message; for example, after he drinks a nutritional potion, the magician can miraculously repair a cut rope, or he can do tricks with nutritional playing cards. Finally, magic could be used to combat food taboos. Most nutrition educators, with a little practice, can master a few simple tricks. (DP-E)

IV Primary Health Manpower—Training and Utilization

IV.1 Primary Medical Care

IV.1.1 Professional

See also: 4215, 4588, 4605, 4608, 4609, 4610, 4611, 4612, 4613, 4624, 4625, 4691.

- 4549 Dutra de Oliveira, J.E.** *Teaching nutrition in medical schools: past, present and future.* In Bourne, G.H., ed., *World Review of Nutrition and Dietetics*, Vol. 25, Basel, Switzerland, S. Karger, 1976, 142-165. Engl. Refs.

Although it is universally recognized that good food is essential to good health, nutrition is inadequately taught in most medical schools. The author reviews the teaching of nutrition around the world and discusses the problems and possible solutions associated with it. The work of the International Union of Nutritional Sciences is examined and some personal experiences illustrating the nutritional knowledge of doctors and nutritional diseases in Brazil are related. A case is made for the treatment of medical nutrition, or nutrology, as a separate specialty. (DP-E)

- 4550 Gellhorn, A., Fulop, T., Bankowski, Z., Gellhorn, O. ed(s).** Council for International Organizations of Medical Sciences, Geneva. *Health needs of society: a challenge for medical education/Société et santé: l'enseignement médical face à un défi.* Geneva, WHO, 1977. 221 p. Engl. Refs. Tenth CIOMS Round Table Conference, Ulm, Germany FR, 6-10 Jul 1976; Scientific Session of the 10th General Assembly of CIOMS, Geneva, Switzerland, 10 Nov 1976.

One paper and some discussions are presented in French.

Rising concern about medical education becoming too far removed from health needs prompted the Council for International Organizations of Medical Sciences, in a round table conference, to examine the potential contributions and limitations of medical education with regard to meeting the needs of community health services. Briefly, the participants recognized that: maldistribution of physicians, over-specialization, too much emphasis on curative medicine in practice and research, and centralization of services are obstacles to meeting the health needs of society; better coordination between the authorities responsible for health care services and those responsible for the education of health personnel is needed; and reforms in undergraduate education, student

selection, and the medical curriculum are in order. (HC-L)

- 4551 Goic, A.** *Modelo chileno de relación docente-asistencial.* (Chilean medical education-medical care model). *Revista Médica de Chile* (Santiago), 103(1), Jan 1975, 38-43. Span. 31 refs. Quinto Congreso Panamericano de Educación Médica, Caracas, Venezuela, 2-4 Nov 1974.

A long tradition of cooperation between medical schools and health services has helped Chile to adapt medical education to the country's health care needs and to distribute, by means of a system of faculty regionalization, professional resources and higher education more evenly throughout the country. This paper traces the historical evolution of the process, which culminated in 1974 with the formation of the *Comisión Nacional Docente-Asistencial de Salud*—a permanent body that coordinates the medical activities involving universities, governmental health care institutions, and the national medical association. (HC-L)

- 4552 Hinton, N.** *Volunteering for a career—Coney Island Hospital volunteer programme.* Aspects: the International Journal of Volunteer Services (Washington, D.C.), Action Pamphlet No. 4200.19, 1(4), Dec 1977, 17-22. Engl.

The Coney Island Hospital (New York, USA) sponsors a health careers exploration programme that annually trains and deploys 220 student volunteers who are planning future careers in medicine, nursing, physiotherapy, or laboratory technology. In 1976, the volunteers gave a total of 206 330 hours of service to the hospital (the equivalent of the time worked by 130 full-time employees), thus saving the hospital well over US\$1 million. There are over 20 training courses for volunteers, ranging in time from 2 hours-3 months. Volunteers find their experience helpful when they later enter medical or nursing school. (DP-E)

- 4553 Plovnick, M.S., Fry, R.E., Rubin, I.M.** *Managing health care delivery; a training program for primary care physicians.* Cambridge, Mass., Ballinger, 1978. 130p. Engl.

This manual outlines the curriculum of a management training course for physicians that is organized into six sessions of approximately 2 hours each. Session 1 covers factors influencing the coordination of care and describes a systematic way to diagnose and handle the basic issues. Session 2 deals with management goals and goal conflicts, while session 3 introduces a framework for

resolving conflicts among health workers concerning responsibilities and tasks. Session 4 describes a system for allocating decision-making responsibility. Session 5 develops approaches to the design of more effective organizational structures for health care delivery. The final session discusses the pressures of change and strategies for implementing changes where needed. (FM)

- 4554 Soper, F.L. Duffy, J. ed(s).** Pan American Health Organization, Washington, D.C. *Ventures in world health: the memoirs of Fred Lowe Soper.* Washington, D.C., Pan American Health Organization, Scientific Publication No.355, 1977. 365p. Engl.

These edited memoirs recount the education and career of Dr. Fred Lowe Soper, a public health administrator and preventive medicine practitioner. His work in combatting malaria, typhus and especially yellow fever in Latin America, particularly Brazil and Paraguay, and Egypt is emphasized. Dr. Soper worked closely with the Rockefeller Foundation, WHO, and PAHO; some of their early disease control programmes in these areas are described. (DP-E)

- 4555 Yonsei University, College of Medicine, Seoul.** *Kang Wha community health teaching project.* Seoul, Yonsei University, College of Medicine, 1976. 14p. Engl.

The teaching centre at Kang Wha, Korea, serves as a rural training laboratory for the integration of community health care and medical education. It advocates regionalization, development of health care from the grass roots upwards, and integration of services, manpower, administration, education, and financing. Medical students engage in field work as members of regional teams. The centre's health post project, a model for regionalization readily adaptable for use in other areas of the country, utilizes family health workers to stimulate health consciousness in the communities and to serve as communication channels between the community and the teaching project. The centre has also organized comprehensive health services at the township level and plans are underway for a county referral hospital. (FM)

IV.1.2 Nonprofessional

See also: 4202, 4206, 4213, 4222, 4232, 4271, 4347, 4502, 4583, 4584, 4618, 4645, 4649, 4651, 4864.

- 4556 Abcede, J.C.** *Experiment in Leyte.* World Health (Geneva), Jul 1978, 8-11. Engl.
Also published in Arabic, French, German, Italian, Persian, Portuguese, Russian, and Spanish.

The experience of two women working in Philippine villages is described. The 1st, selected by her neighbours and trained in an 18-month course in midwifery, worked for 10 villages with a total population of 5 000. She dealt with sanitation, water supply, and common health problems as well as maternal care; much of her time was spent encouraging the villagers in self-care activities. The other woman, after 8 weeks of training, was posted in a village where she was able to motivate the people to fence

in their pigs, dig drainage canals, and grow food. She was also successful in organizing fund-raising activities and socially-oriented clubs. (DP-E)

- 4557 Arango de Ruales, M.E.** Universidad del Valle, División de Salud, Programa de Investigación en Modelos de Prestación de Servicios de Salud, Unidad de Recursos Humanos, Cali, Colombia. *Modelos de reclutamiento y selección para aspirantes al cargo de promotoras urbanas de salud. (Models for recruitment and selection of candidates for the position of urban health promoter).* Cali, Colombia, Universidad del Valle, División de Salud, Programa de Investigación en Modelos de Prestación de Servicios de Salud, Unidad de Recursos Humanos, Sep 1973. 1v.(various pagings). Span.
Unpublished document.

This document describes, in general terms, the various steps involved in a methodology that was developed for use in the recruitment and selection of urban health promoters in Cali, Colombia. Annexes include simple forms, criteria, questionnaires, and interview schedules relevant to this particular programme. Candidates are tested on general knowledge, writing and spelling skills, ability to read a map, communications skills and ability to establish a rapport with others, etc. (HC-L)

- 4558 Barbero, E.Z.** *Barangay volunteer medics programme.* Aspects: the International Journal of Volunteer Services (Washington, D.C.), Action Pamphlet No. 4200.19, 1(4), Dec 1977, 22-27. Engl.

The Barangay Volunteer Medic (BVM) programme encourages Philippine paramedical workers, especially traditional practitioners, to provide auxiliary health services in their own communities. Students are selected by their communities and receive 3 weeks training in preventive care. By 1977, there were 235 BVMs working in depressed areas of the Philippines. The contribution of volunteers from other countries is noted. (DP-E)

- 4559 Berkeley, J.S.** *Training health workers for primary care in a developing health service.* Medical Education (Oxford, UK), 12(3), 1978, 209-213. Engl.

With WHO/UNICEF aid, a health school was established in Thimphu, Bhutan, in 1975 to train health auxiliaries to staff the basic health units set up throughout the rural areas. A 2-year course for health assistants trained students with 9-10 years education to take charge of the basic health units; a 1-year course for basic health workers with 7-8 years education prepared them to undertake regular house visits, data collection, etc.; and a 2-year course for nurse-midwives with 7-8 years education taught the essentials of maternal child health. All these auxiliaries are considered multipurpose and team work and community cooperation are practiced. The training programme and the performance of each student are evaluated on a regular basis. (AF)

- 4560 Bryant, J.H.** *Community health workers; the interface between communities and health care systems.* WHO Chronicle (Geneva), 32(4), Apr 1978, 144-148. Engl.

Also published in French, Russian, and Spanish.

As one link between the health needs of the community and the support services of the health care system, community health workers (CHWs) find themselves subject to conflicting loyalties and allegiances, e.g., the need for fostering community self-reliance in health matters while using the health care system to supplement their own efforts. To provide a balanced approach to such problems, attention must be given to recruiting and training CHWs and to their formal and informal links with the health system. This article summarizes the discussions that took place during a symposium on the CHW. (Modified journal abstract.)

- 4561 Charles, G., Stimson, D.H., Maurier, M.D.** *Physician extender training program based on clinical algorithms.* Western Journal of Medicine (San Francisco, Cal.), 127(1), Jul 1977, 63-68. Engl. 10 refs.

A 12-week training programme for physician extenders at the Veterans Administration Hospital in San Francisco (California, USA) is based on 39 clinical algorithms or sets of instructions for solving clinical problems. Each algorithm or protocol requires a certain number of skills which are taught progressively during the 12 weeks. Other topics in the curriculum include hospital orientation, medical terminology, ethics, laboratory procedure, and physical examinations. The students also gain experience in subspecialty clinics and work 1 day each week in a drop-in clinic. The 39 algorithms provide a ready-made framework for evaluating student progress. (FM)

- 4562 Federación Panamericana de Asociaciones de Facultades de Medicina, Bogotá.** *Inventario sobre características de adiestramiento de personal básico en salud rural. (Inventory of the training characteristics of basic rural health personnel).* Boletín de la Federación Panamericana de Asociaciones de Facultades de Medicina (Bogotá), 14(2), Jun 1978, 10-12. Span.

The *Federación Panamericana de Asociaciones de Facultades de Medicina*, with the support of the IDRC, has undertaken an inventory of the types and characteristics of basic rural health personnel in some Latin American countries (Guatemala, Paraguay, and Venezuela), their functions and supervision, and the policies, programmes, institutions, and materials relative to their training. Information for the inventory was based on the results of three questionnaires that were administered at the central, supervisory, and institutional levels in each country. This paper describes the inventory methodology and summarizes its preliminary findings. (HC-L)

- 4563 Folmer, H.R.** *TOMKIRP (translation of medical knowledge into rural practice).* East African Medical Journal (Nairobi), 54(3), Mar 1977, 108-114. Engl. 8 refs.

The large body of medical knowledge transmitted to

developing countries is of limited use in the hands of the auxiliary health worker, to whom falls the burden of implementation. The author suggests that teaching with visual aids will enhance the ability of the auxiliary to cope. He describes one such experimental course (TOM-KIRP) carried out in Kenya and Tanzania and discusses the results and implications. Further suggestions, such as improved working conditions and continuous training, are offered. (DP-E)

- 4564 Johnson, K.G., Deuschle, K.W.** *Strategies for prevention using allied health professionals.* Preventive Medicine (New York), 6(3), 1977, 386-390. Engl. 10 refs.

The experience of the 1955 Cornell Navajo Many Farms Project serves as a model for the utilization of indigenous health workers in preventive health care systems. Described as health visitors, indigenous workers were trained to provide preventive services such as immunization, tuberculin tests, simple physical examinations, etc. One of their major contributions was in maintaining liaison between the health professionals and the patients. The authors cite other examples of the successful integration of auxiliary health workers into the health care system, where they are particularly useful in performing non-emergency, preventive tasks that free valuable time for physicians. (FM)

- 4565 Kaul, S.A.** *Trial for village health workers in a remote area of Himachal Pradesh.* In *Alternative Approaches to Health Care*, New Delhi, Indian Council of Medical Research, 1976, 87-92. Engl. Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

As part of a hospital project in Himachal Pradesh (India), five village women aged 19-20 years were trained as village health workers (VHWs). Each week they spent one morning receiving lessons at the hospital and one afternoon gaining practical experience under the supervision of a physician in the field. They learned to treat diarrhea and other common illnesses, administer simple medicines, conduct normal deliveries, identify and refer patients with tuberculosis and congenital abnormalities, and advise on child nutrition, family planning, and immunization. Despite financial problems and the VHWs' own feelings of inadequacy, they are well accepted and the project is considered a success. (RMB)

- 4566 Mathur, Y.C., Kumar, A.** *Role of village health worker in health problems of developing countries.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 24(3), Jun 1978, 133-134. Engl.

As part of an effort to provide maternal child health services to 47 Indian villages, Niloufer Hospital started a programme to train locally-selected village women as *gram svastikas* or village health workers (VHWs). The VHWs receive 2 weeks of classroom training and 2 weeks of practical experience in the field. Their duties include: registering births, deaths, pregnant women, and couples eligible for family planning; checking on children's im-

munization; identifying malnourished children and ensuring that they receive available food supplements; educating mothers in child health and nutrition; and providing first aid for fever, diarrhea, convulsions, and injuries. The contents of the food supplement are described. (DP-E)

- 4567 McCord, C., Kielmann, A.A.** *Successful programme for medical auxiliaries treating childhood diarrhoea and pneumonia.* Tropical Doctor (London), 8(4), Oct 1978, 220-225. Engl.

Continuous evaluation and training are essential components of any programme deploying auxiliary health workers. This paper describes how in-service training and new standing orders improved the performance of community health workers at the Rural Health Research Centre, Narangwal, India, and resulted in a 50% reduction in mortality due to diarrhea and a 45% reduction in the incidence of pneumonia in children aged less than 3 years. Descriptions of the evaluation, new standing orders, and in-service training programmes are given and statistical data are included. (HC-L)

- 4568 Molina G., G., Turizo C., A., Cardona C., J.** *Responsable de salud, pilar de la organización local. (Community health volunteer, pillar of the local organization).* Revista de la Escuela Nacional de Salud Pública (Medellín, Colombia), 1(3), Jul-Dec 1975, 9-28. Span. 10 refs.

Community health volunteers are individuals selected by local organizations to promote active and informed participation in the health services. In two stages of 8-10 and 20-30 sessions, respectively, they are introduced to the work of the various health personnel and given some elementary training in hygiene, preventive medicine, and first aid. Membership in an association called the Health Committee helps them to coordinate their efforts and keep informed. This paper describes the training and functions of the community health volunteer and the implementation of the concept in the Department of Antioquia, Colombia. (HC-L)

- 4569 New, P.K., New, M.L.** *Barefoot doctors of China: healers for all seasons.* In Landy, D., ed., Culture, Disease, and Healing: Studies in Medical Anthropology, New York, Macmillan, n.d., 503-510. Engl. Refs.

The authors describe the training and deployment of barefoot doctors in the People's Republic of China, the integration of Chinese and Western medicine, cooperative health plans, family planning programmes, and the administrative organization of communes and urban areas. The possibility of transplanting the barefoot doctor system to other, particularly Western, countries is examined. While training would not be difficult, much of the success of the barefoot doctors is due to the way that China manages the delicate balance of mass participation and central directives by having its citizens accept the ideological position of the government. This political climate does not exist outside of China. (DP-E)

- 4570 Petrusa, E.R., Taylor, C.B., Simmons, R., Cabe, W.** *Three-component course in psychiatry for primary care physician's assistants.* Journal of Medical Education (Chicago, Ill.), 53(9), Sep 1978, 770-772. Engl.

Psychiatric training received by physician's assistants at the University of Utah Medical Center (USA) is divided into three components: basic information that can be taught in a self-instructional format, experiential content taught by an instructor, and training in psychiatric data collection and diagnosis. The components and the excellent student performance in each are described. The course has successfully taught the required skills and allowed instructors to devote more time to other matters. (DP-E)

- 4571 Scheffler, R.M.** *Employment, utilization, and earnings of physician extenders.* Social Science and Medicine (Oxford, UK), 11(17-18), Dec 1977, 785-791. Engl. 21 refs.

Data collected from 1971-1973 by an air mail survey of physician extenders (PEs) in the USA include information about the type of tasks that PEs perform, such as laboratory work, clerical duties, and teaching responsibilities, as well as a discussion of their salary levels. Variables that affect the time spent by a PE in patient care and determinants of the earnings of PEs are analyzed. Statistical data are included. (DP-E)

- 4572 Sekou, A.** *Expérience nigérienne de coopération avec les guérisseurs. (Cooperation with traditional healers in Niger).* Médecine Moderne et Médecine Traditionnelle (Paris), 36, Jul 1977, 10-13. Fren.

Traditional healers are frequently the only health workers available in rural areas of Niger; while they exhibit considerable skill in some areas (i.e., the treatment of mental and psychosomatic illnesses), their interventions in others (e.g., the management of trauma) can be dangerous or even fatal. This article suggests that the medical establishment give serious thought to cooperating with traditional healers as a means of both extending health care coverage and guiding their practices. It also describes a programme for training and deploying traditional birth attendants in a voluntary capacity and discusses some of the factors militating against the success of a similar programme for traditional healers. (HC-L)

- 4573 Skeet, M., Elliott, K. ed(s).** *Health auxiliaries and the health team.* London, Croom Helm, 1978. 222p. Engl. Refs.

International Hospital Federation Congress, Tokyo, Japan, May 1977.

This monograph is divided into 3 parts: the 1st deals with the role of the auxiliary health worker as a member of the health team and in the instigation and implementation of health activities; the 2nd describes some experiences in the training and deployment of auxiliaries in the USA and the Third World (Bangladesh, Indonesia, Iran, Jamaica, Papua New Guinea, Peru, Philippines, and Tanzania); and the 3rd presents papers given at the 23rd International Hospital Federation Congress describing

auxiliary programmes that the speakers had initiated or in which they had been involved. Specific types of auxiliaries covered include nurses and village health workers. (HC-L)

- 4574 Stewart, R.D.** *Training of paramedical personnel.* British Journal of Anaesthesia (Altrincham, UK), 49(7), 1977, 659-671. Engl. 10 refs.

This article discusses the training of paramedics to provide pre-hospital care or emergency medical services. The need to educate the public on how to respond to emergencies is briefly considered and previous efforts in the use of paramedical personnel in emergency care are related. The author then deals at length with the points of contention surrounding the training of the paramedics: the most appropriate personnel to do the training, the training curricula, and the roles and responsibilities of the paramedics. General guidelines for handling these problems are offered. (DP-E)

- 4575 Tungsubutra, K.** *Health care delivery system to reach the people.* Aspects: the International Journal of Volunteer Services (Washington, D.C.), Action Pamphlet No. 4200.19, 1(4), Dec 1977, 4-8. Engl.

Because of the difficulties of persuading physicians to practice in rural areas, the Thai government initiated a programme to train locally-recruited villagers as village health volunteers (VHVs). After 2 weeks training, the VHVs are able to: provide health education about nutrition and parasitic diseases; treat diarrhea, malaria, colds, scabies, lice, fungus infections, and tonsillitis; provide first aid; and refer complicated cases. Methods of supervision and evaluation are discussed. (DP-E)

IV.2 Primary Nursing Care

IV.2.1 Professional

See also: 4224, 4552, 4573, 4593, 4628, 4644, 4646.

- 4576 Altschul, A.** *Education and the role of nurses.* Nursing Times (London), 74(21), 25 May 1978, 885-887. Engl.

Problems in defining the role of the nurse are due to the fact that this appellation is applied indiscriminately to the person who provides basic care, the person who organizes basic care, and the person who, along with the doctor and administrator, functions in a major decision-making capacity at the highest level of the UK's National Health Service. This document discusses the implications of such role diversity for nurse training, emphasizing the importance of providing those members of the profession who will be occupying positions of great responsibility with a university education. (HC-L)

- 4577 Aragon, L.M.** *Nurse as a health worker—new horizons.* Philippine Journal of Nursing (Manila), 46(3-4), Jul-Dec 1977, 152-161. Engl.

The author examines recent international developments

in the role and training of the nurse and the history of nursing services in the Philippines. She describes the nurse's function in the fields of family health, adult health, care of well children, family planning, obstetrics, and geriatrics and attempts to define the contribution of the nurse to primary care. The need for new curricula and continuing education is stressed. The author feels that Philippine nurses would benefit from the same sort of labour movements that have been organized by nurses in other countries. (DP-E)

- 4578 Beltrán Jackson, M.V.** *Community-oriented curriculum at the Pamantasan Ng Lungsod Ng Maynila College of Nursing.* Philippine Journal of Nursing (Manila), 46(3-4), Jul-Dec 1977, 174-180. Engl.

In 1969, the Philippine College of Nursing of the Pamantasan ng Lungsod redesigned the nursing curriculum so that students would begin learning in the community with healthy families in their own social setting and later expand their training to include individuals with health problems in a variety of settings. The decision-making process that was used to plan the new curriculum is examined. Student comments on the relevance of their training after the curriculum revisions are included. (DP-E)

- 4579 Douglas Pedrosa, R., Llorens Figueroa, J.A., Klaindorf, B., Hernández Elías, R.** *Diseño del plan de estudios de la licenciatura en enfermería. (Design of the nursing curriculum).* Revista Cubana de Administración de Salud (Havana), 3(1), Jan-Mar 1977, 91-99. Span.

In 1973, a Cuban commission set out to design a study plan for a licentiate in nursing (a university degree). The commission conducted a functional analysis of the proposed licentiate's job, identifying 336 skills and 393 items of knowledge necessary to its performance and incorporating them as intermediate objectives into this plan: 3 years (2 semesters or 18 weeks, respectively) of clinical scientific modules, general studies, and field activities, followed by a 4th year devoted to specialization and appropriate research in nursing, teaching, or management. This paper describes both the design process and the resulting curriculum. (HC-L)

- 4580 Ford, L.C.** *Health care: who will lead the way?* Fogarty International Center Series on Preventive Medicine (Bethesda, Md.), 1, 1975, 1-12. Engl.

The traditional response to meeting expanding health care demands has been to produce more nurses, dentists, and, particularly, doctors. Unfortunately, this strategy does not meet the needs of comprehensive health care. This paper focuses on one effort to address the underlying issues: the nurse practitioner. After examining the evolution of the nurse over the last 30 years, the author considers the definition and role of the nurse practitioner and the problems associated with it. Finally, a new strategy for the future is suggested and some recommendations offered for shifting the emphasis from medical care to health services. (DP-E)

- 4581 Geolot, D., Alongi, S., Edlich, R.F.** *Emergency nurse practitioner: an answer to an emergency care crisis in rural hospitals.* Journal of the American College of Emergency Physicians (East Lansing, Mich.), 6(8), Aug 1977, 355-357. Engl.

A 9-month training programme at the University of Virginia, USA, was designed and implemented to prepare the nurse to diagnose and treat patients in the hospital emergency department under the supervision of a physician. Qualified candidates who had identified a physician preceptor or were from an area with embryonic emergency medical systems were given priority in the selection process. The programme dealt with interview techniques and physical assessment skills, clinical experiences in rural and urban emergency departments, and preceptorship in the community hospital. Programme graduates were certified by the state of Virginia as "emergency nurse practitioners." (DP-E)

- 4582 Hendry, J.M., Mowat, K.A.** *Nurse practitioner's role in private practice.* Canadian Family Physician (Willowdale, Ont.), 24, Aug 1978, 799-781. Engl.

In order to determine the potential of the nurse practitioner in private medical practice, the authors examined the activities of one nurse practitioner in an independent pediatric practice in Toronto, Canada. Each of her activities is categorized by its functional area and discussed in relation to its effect on medicinal management and office efficiency. The two main obstacles to the effective use of the nurse in this role (cost and tradition) and ways of overcoming these obstacles are discussed. (DP-E)

- 4583 Lamp, New York.** *Nurse practitioner.* Lamp (New York), 34(12), Dec 1977, 27-31. Engl.

The expanded role of the nurse practitioner is traced from its beginnings with the feldshers of 17th century Russia to the present day growth of the concept of the nurse as a physician's assistant. The term is defined with reference to its relationship to other concepts such as medical assistant, physician associate, nurse clinician, etc. A general summary of the duties a nurse practitioner might be expected to perform emphasize office duties such as telephone consultations, history-taking, physical examinations, and follow-ups. The attitudes of the medical profession, and of nurses themselves, to these increased responsibilities are also described. (FM)

- 4584 Lewis, M.A.** *Provision of preventive services by nurse practitioners and physician assistants: present and future.* Fogarty International Center Series on Teaching Preventive Medicine (Bethesda, Md.), 1, 1975, 101-110. Engl. Refs.

The author discusses preventive medicine in terms of primary (immunization, health education, etc.), secondary (well-child clinics, visual and auditory screening, etc.), and tertiary (rehabilitation, etc.) prevention. At present, medical assistants and nurse practitioners are involved in all areas of prevention, especially in the specialties in which they tend to be employed, notably family health. The author points out ways in which they could be further utilized and discusses the obstacles

posed by physicians and the established health care system. The cognitive, psychomotor, and affective components of a curriculum of preventive medicine are examined. (RMB)

- 4585 Pesznecker, B.L., Draye, M.A.** *Family nurse practitioners in primary care: a study of practice and patients.* American Journal of Public Health (New York), 68(10), Oct 1978, 977-980. Engl. 16 refs.

A 1977 study of 8 905 patients seen by 356 family nurse practitioners in the USA is described. The patients were mostly white (6:1) and aged less than 65 years. Members of racial minorities and elderly patients tended to use public clinics. The predominant patient problems were prevention/health supervision and respiratory diseases. Implications of the findings are discussed. Statistical data are included. (DP-E)

- 4586 Stafford Hardy, V.G.** *Emergency nurse practitioner: the role and training of an emergency health professional.* Journal of the American College of Emergency Physicians (East Lansing, Mich.), 7(10), Oct 1978, 372-376. Engl. 30 refs.

The role and training of nurse practitioners in the USA are discussed. Recently, three training programmes for emergency nurse practitioners (ENPs) have been initiated. Since 50%-75% of patients who visit emergency departments are not emergencies but require primary, non-acute care, the ENP must provide treatment and health education to these patients as well as emergency medical care to the remaining 25%-50%. ENPs were also effective at triage and less inclined to overuse laboratory and X-ray tests as interns did to compensate for inexperience and insecurity. Statistical data are included. (DP-E)

- 4587 Sullivan, J.A., Dachelet, C.Z., Sultz, H.A., Henry, M.** *Rural nurse practitioner; a challenge and a response.* American Journal of Public Health (New York), 68(10), Oct 1978, 972-976. Engl.

A US survey of 525 employed nurse practitioners (NPs) who graduated from May 1975-June 1976 revealed that 85 (16%) were located in rural areas. While 91% of rural NPs had short-term certificates rather than master's degrees, 47% had already earned a baccalaureate or master's degree prior to NP training. Family NPs comprised the most popular specialty area, followed by pediatric and adult specialties, although most were providing a broad range of primary services to the general public. Major NP motivations for entering rural practice were to participate in a creative approach to health care delivery and to enjoy role autonomy. Statistical data are included. (Modified journal abstract.)

- 4588 Wagstaff, L.A.** *Changing role of doctors in Soweto clinics' health care teams.* South African Medical Journal (Capetown), 53(20), 20 May 1978, 805-806. Engl.

A project in Soweto, South Africa, demonstrates that delegation of common health problems and their man-

agement to specially trained primary health care nurses allows the clinic doctor in a health care team to employ his own skills and time more effectively. Consequently, the physician may become an expert in comprehensive community health care or develop related research interests, thus helping to promote optional health services relevant to the local situation. (Modified journal abstract.)

- 4589 Wagstaff, L.A., Beukes, P.J.** *Paediatric primary health care nurse project in Soweto.* South African Medical Journal (Capetown), 52(27), 24 Dec 1977, 1086-1088. Engl.

In-service programmes to train nurses in child health, adult health, and midwifery and family planning have been implemented at Baragwanath Hospital (Soweto, South Africa) in an attempt to compensate for the lack of physicians and the breakdown of normal services in the area. A training group of six nurses spends 1-2 hours per day in formal study and the rest of the day examining patients; after approximately 2 months of training, four nurses share the patient load previously handled by one physician. Nurses diagnose and treat common conditions and refer complicated conditions to doctors. By March 1977, the pediatric nurses were seeing 1 000 patients per week. (DP-E)

- 4590 Wynen, E.M.** *Nurse practitioners in Ghana.* Tropical Doctor (London), 8(3), Jul 1978, 180-181. Engl.

An experimental programme to train nurse practitioners in a mission hospital in Ghana was begun in March 1977. Chosen from among enrolled nurses, who have had 2 years of training after middle school, the nurse practitioner undergoes a 6-month training course consisting of 12 lectures. Topics covered include an introduction to the concept of the nurse practitioner, a review of various systems of the body, and procedures involved in diagnosing simple diseases, following prescribed treatments, and referring patients to doctors. The lectures are followed by practical work in the wards under the supervision of physicians. It is understood that, because of their limited education, such nurse practitioners will always work under supervision, but it is felt that they will help lighten the case-load now faced by professional personnel. (FM)

IV.2.2 Nonprofessional

See also: 4661.

- 4591 Engle, E.M., Bethell, H.D.** *Implementing an occupational therapy assistant training course for the eastern Caribbean.* American Journal of Occupational Therapy (Rockville, Md.), 31(8), Sep 1977, 493-498. Engl.

Following a brief general description of the health care problems particular to the eastern Caribbean, the authors examine the Barbados Community College training programme for occupational therapy assistants. Designed to train personnel to provide rehabilitation services in large institutions where there are no professional therapists, the programme emphasizes independent

thinking and organizational skills. The curriculum was based on the social and cultural characteristics of the community. Student selection, teaching strategy, clinical practice, and student evaluation are also studied in this report. (FM)

- 4592 Hardie, M., Hockey, L. ed(s).** *Nursing auxiliaries in health care.* London, Croom Helm, 1978. 217p. Engl. Refs.

International Workshop on Nursing Auxiliaries in Health Care, Edinburgh, Scotland, 1977.

Delegation of tasks within the nursing services is assuming more importance as countries throughout the world endeavour to curb the rising costs of health care. This workshop brought together participants from 14 countries in Western Europe and North America with a view to examining the various approaches to the training, deployment, and supervision of auxiliary nursing personnel and raising issues regarding reforms that may be necessary within the nursing and allied professions. This book presents the case studies, position papers, and discussion summaries from the workshop. Included are an index, lists of participants and contributors, and an international table comparing length of nurses' training. (HC-L)

IV.3 Primary Family Planning and Midwifery Care

IV.3.1 Professional

- 4593 Haddad, W.** *Enseignement de la santé et de la planification familiales aux infirmières et aux sages-femmes. (Teaching family health and family planning to nurses and midwives).* Journal de Gynécologie, Obstétrique et Biologie de la Reproduction (Paris), 7(2), 1978, 307-311. Fren.

The basic principles of planning a training course for nurses and midwives involved in family planning programmes are presented. The objectives of each programme must take into account the needs of the particular country. The various roles that nurses and midwives can play in family planning education are examined and the ideal qualities of teaching personnel and prospective students are described. Course content is discussed in the context of the theoretical and practical knowledge it must impart and the attitudes it should instil. The author also considers teaching methods, evaluation, and the importance of on-the-job training and upgrading. (FM)

IV.3.2 Nonprofessional

See also: 4213, 4556, 4559.

- 4594 Arango de Bedoya, Y.** Universidad del Valle, División de Salud, Programa de Investigación en Modelos de Prestación de Servicios de Salud, Unidad de Recursos Humanos, Cali, Colombia.

Calí, Colombia, Secretaría de Salud Municipal. *Algunas características de las comadronas del barrio Unión de Vivienda Popular, Cali. (Some characteristics of the traditional birth attendants of the barrio Union de Vivienda Popular, Cali).* Calí, Colombia, Universidad del Valle, División de Salud, Programa de Investigación en Modelos de Prestación de Servicios de Salud, Unidad de Recursos Humanos, n.d. 1v.(various pagings). Span.

Unpublished document.

As part of a health care delivery programme in a disadvantaged urban *barrio* of Calí, Colombia, 10 traditional midwives have been delegated functions as members of the health team. Specifically, they attend deliveries in the homes of those mothers deemed low-risk by the nurse auxiliary. This document presents in 12 tables the results of an enquiry into the characteristics (age, education, source of training, additional occupation, etc.) of these women. (HC-L)

- 4595 Bland, J.** *Better midwife.* World Health (Geneva), Jul 1978, 24-27. Engl.

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

As part of an effort to integrate traditional healers into the health care system, Peru provided a 2-week training course for indigenous midwives. One student, who had been a traditional midwife for 28 years, readily accepted the training and took great pride in her new status and in using the equipment and record-keeping methods acquired from the course. The author notes that mortality and morbidity have greatly declined since the course began. The problems of integrating a tribe of traditional healers into the health care system of Ecuador are discussed briefly. (DP-E)

- 4596 Corbould, C.** *Medical care in rural Bangladesh.* Nursing Mirror (London), 146(11), 16 Mar 1978, 25-27. Engl.

A volunteer describes her experience as a family planning and mother and child health care worker for the Christian Health Care Project (CHCP) in rural Bangladesh. Working among poor, uneducated people, she found that home visits and mobile clinics were the most effective methods of keeping the mothers' interest. She credits much of the CHCP's success to the good relationship that the health workers enjoy with the villagers and the coordination of the health team's efforts with those of the local government. (DP-E)

- 4597 Waife, R.S. ed(s).** *Pathfinder Fund, Chestnut Hill, Mass. Pathpapers.* Chestnut Hill, Mass., Pathfinder Fund. Engl.

Pathpapers is a series of occasional papers on innovative projects sponsored by the Pathfinder Fund, a US aid organization that encourages the use of paramedical personnel in the delivery of family planning services. To date, projects have been conducted in Haiti, Egypt, Senegal, Togo, Bolivia, Colombia, Mexico, Thailand, the Philippines, and Turkey. The 1st *Pathpaper* describes a Turkish project for midwifery training based on simple

and practical maternal and child health criteria. By concentrating on teaching midwives only what they can efficiently and effectively apply in their field work, this project is a model for other nonphysician training programmes. A bibliography on the use of paramedical personnel in family planning is included. (DP-E)

IV.4 Primary Dental Care

IV.4.1 Professional

See also: 4256, 4534.

- 4598 Meilach, M.** *Jungle dentist.* Journal of the Chicago Dental Society (Chicago, Ill.), 70(2), Feb 1977, 18-21. Engl.

An American dentist spent 1 month at the *Hospital de la Familia*, Nuevo Progreso, Guatemala, and traveled each day to a different jungle village to perform extractions. This paper gives an account of the socioeconomic, cultural, dental, and working conditions that he encountered there plus information for other dentists interested in volunteering some of their time to this cause. (HC-L)

IV.4.2 Nonprofessional

See also: 4256.

- 4599 Camrass, R.** *Polynesian school dental therapists: community dentistry through voluntary co-operation in Western Samoa.* New Zealand Dental Journal (Auckland, New Zealand), 71(324), Apr 1975, 70-73. Engl. 9 refs.

Under the auspices of WHO, two school dental therapists trained in Penang, Malaysia, and a 3rd trained in Auckland, New Zealand, will serve the needs of three atypical urban schools in Western Samoa. One will operate in an existing dental clinic, while voluntary parent-teaching donations are providing suitable buildings for the other two therapists. Equipment needed is supplied by the government. Dental health education, topical fluoride therapy, and supervision of the school tooth-brushing programme are part of the activities of the therapists. (Modified journal abstract.)

- 4600 Hankin, R.A.** *Cost of providing restorative dentistry in an alternative delivery mode.* Journal of Public Health Dentistry (Raleigh, N.C.), 37(3), Summer 1977, 217-223. Engl. 9 refs.

Annual Meeting of the American Public Health Association, Dental Care Section, Boston, Mass., 19 Oct 1976.

The Forsyth Dental School experiment in Boston (Massachusetts, USA) demonstrated that dental hygienists can be trained to perform complete restorative dental procedures. The study focused on the length of training required and the qualitative and quantitative aspects of the services. Economic benefits were also an important part of the study, which revealed a reduction of as much as 44% in fees for amalgam restoration. An expanded

role for dental hygienists will also lead to an improved utilization of dentists acting as team supervisors. (FM)

- 4601 Khanna, S.L.** *New approach to dental health care; the classroom teacher as a dental health educator.* Canadian Journal of Public Health (Toronto, Ont.), 69(5), Sep-Oct 1978, 371-374. Engl. 18 refs.

A study to determine the effectiveness of school teachers as dental health educators was conducted in elementary schools on Texada Island, British Columbia, Canada. Teachers were instructed in the causes, incidence, and prevention of dental diseases and, with the help of chair-side demonstrations, shown the various stages of periodontal diseases and caries, the nature of dental plaque and how to disclose it, and proper brushing and flossing technique. The teachers showed great enthusiasm for the programme and great improvement in students' oral hygiene was observed after 6 months of its implementation. The importance of maintaining the teachers' interest by providing them with the necessary materials, proper and engaging teaching aids, evaluation, and feedback is pointed out. (HC-L)

IV.5 Primary Laboratory Care

See also: 4222, 4552, 4651.

- 4602 Bull, G.M., Mitchell, F.L.** *Provision of clinical laboratory services in developing countries.* Tropical Doctor (London), 8(3), Jul 1978, 104-109. Engl.

Also published in *WHO Chronicle* (Geneva), 33(6), Jun 1979, 221-223.

Some of the problems involved in equipping clinical laboratories in developing countries are described. Cost, environmental factors, logistic difficulties, and lack of trained staff are some of the factors that often make sophisticated modern equipment inappropriate. Simpler systems of chemical analysis that could fulfil the basic needs of a small laboratory are discussed. For example, a simple colorimeter that meets the specifications of WHO for measuring haemoglobin, urea, protein, bilirubin, and glucose is described. A simple technique for collecting and measuring capillary blood and plasma has also been developed, based on a stainless steel "swizzles-tick." In conclusion, it is suggested that the training of laboratory technicians should emphasize local conditions and cultural differences. (FM)

IV.7 Teaching Aids

IV.7.1 Rural Health Care

See also: 4224, 4537, 4545, 4547, 4548, 4707.

- 4603 Aston, G., Tiffney, J.** *Guide to improving food hygiene.* London, Northwood Publications, 1977. 134p. Engl. 11 refs.

This handbook on clean food handling, written by two

environmental health officers, is designed for all workers in the food processing industry. It covers: the law and the food trade; food poisoning; design and construction of food premises; design of equipment; cleansing techniques; food storage; pest control; personal health and hygiene; markets, stalls, and delivery vehicles; health, safety, and welfare; and health education. An index and a bibliography are included. An appendix contains self-testing questions and answers on the material covered in the text. The book is illustrated with line drawings and photographs. (RMB)

- 4604 Bewes, P.C.** *Management of traumatic paraplegia.* Tropical Doctor (London), 8(4), Oct 1978, 187-188. Engl.

The Kilimanjaro Christian Medical Centre, Moshi, Tanzania, has adopted this methodology for caring for paraplegic patients: turn the patient every 2 hours; put all joints through a full range of movements regularly; anticipate urinary retention and catheterize every 6 hours; and teach the patient a handicraft and secure for him the appropriate form of walking assistance. This methodology has enabled nurses to care for paraplegics in normal hospital beds without special equipment in such a way as to eliminate bedsores and contractures and minimizes urinary complications. On the average, patients are able to leave the hospital within 3-4 months. (HC-L)

- 4605 Bewes, P.C.** *Skin grafting.* Moshi, Tanzania, Kilimanjaro Christian Medical Centre, n.d. 2p. Engl.

An experienced surgeon discusses skin grafting in very practical terms. He covers the selection of instruments and their sterilization, analgesia, and the technique of grafting itself. (DP-E)

- 4606 Bewes, P.C.** *On sterilizing things.* Moshi, Tanzania, Kilimanjaro Christian Medical Centre, n.d. 3p. Engl.

The author gives practical advice on sterilizing various types of medical equipment. He deals at some length with the most desirable sterilizing device (an autoclave or pressure cooker) and recommends alternatives for situations where it is not available. He concludes by summarizing his sterilizing practices at home, on visits, in the hospital, and during mass inoculations. (DP-E)

- 4607 Bewes, P.C.** *Chest aspiration.* Moshi, Tanzania, Kilimanjaro Christian Medical Centre, n.d. 1p. Engl.

The author briefly compares the standard equipment for chest aspiration, the Martin Chest aspiration syringe and three-way tap, with Luer-Lok equipment. He cites the disadvantages of the former and gives directions for using the latter. Lord's procedure for treating 3rd degree haemorrhoids is also outlined. (DP-E)

- 4608 Bewes, P.C.** *Abdominal closure.* Moshi, Tanzania, Kilimanjaro Christian Medical Centre, n.d. Engl.

The author recommends materials and methods for abdominal closure, with illustrations. He notes that non-absorbable sutures are better than catgut, one layer closure is sounder than closing each layer separately, and big bites are better than small, close ones. The advantages, disadvantages, and financial aspects of monofilament nylon, stainless steel wire, and silk are discussed and the Everett suturing technique is described. (DP-E)

- 4609 Bewes, P.C. Ketamine drip anaesthesia.** Moshi, Tanzania, Kilimanjaro Christian Medical Centre, n.d. 2p. Engl.

See also entry 4624.

A method is described of using the drug Ketamine as a continuous intravenous drip rather than as a single-dose injection. The author discusses the advantages of this technique, the procedure, and the types of cases where it is suitable. A post-script examines a more sophisticated and potentially wider use of this method with muscle relaxation and artificial ventilation. (DP-E)

- 4610 Bewes, P.C. Difficult open tibia fracture.** Moshi, Tanzania, Kilimanjaro Christian Medical Centre, n.d. 3p. Engl.

The author discusses problems associated with and advances that have been made in the management of difficult open tibia fractures. Techniques suitable for use by non-specialists in country hospitals are described. The author recommends early debridement, closing the wound only if there is no tension or contamination, traction by a steinman pin through the *os calcis*, saline irrigation of contaminated wounds, penicillin and tetanus prophylaxis, early weight-bearing in a well-fitting cast, etc. (DP-E)

- 4611 Bewes, P.C. Local anaesthesia.** Moshi, Tanzania, Kilimanjaro Christian Medical Centre, n.d. 11p. Engl.

A recommendation is made for more use of local anaesthesia. The author discusses the dangers and advantages involved, the drugs and equipment required, the handling of the patient, and some general principles. Most of the article deals with the use of local anaesthesia in specific situations, including spinal anaesthesia, supraclavicular brachial plexus block, intravenous forearm block, caudal epidural anaesthesia, hernia block, femoral nerve block, infraorbital nerve block, mental nerve block, forehead block, finger blocks, and circumcision. (DP-E)

- 4612 Bewes, P.C. Conservative methods of fracture treatment suitable for upcountry hospitals.** Moshi, Tanzania, Kilimanjaro Christian Medical Centre, n.d. 13p. Engl.

This document was prepared to assist doctors with limited training in traumatology and few technological resources to deal with fractures of varying complexities in isolated district hospitals. It examines the stages of bone setting and healing as they occur in nature; describes simple methods of dealing with fractures of the femur, humerus, clavicle, tibia, ulna, and radius; and considers why some of the more traditional methods of fracture

treatment sometimes produce disappointing results. A short, illustrated paper describing Perkins' traction (a method of treating fractured femurs that does not require expensive or bulky equipment) is appended. (HC-L)

- 4613 Block, F.E., Beville, C., Cook, H., Alongi, S., Delcastilho, L. Self-instructional emergency medicine program for medical students.** Journal of the American College of Emergency Physicians (East Lansing, Mich.), 6(1), Jan 1977, 4-6. Engl.

A self-instructional programme in emergency medicine, designed to give the student the minimum level of knowledge needed to diagnose emergency medical situations, has been developed for 1st-year medical students at the University of Virginia School of Medicine (USA). Evaluation is based on written and practical examinations. Self-instructional guides, algorithms, videotapes, and reading matter are the teaching materials. Successful graduates of the course are certified by the Commonwealth of Virginia as emergency medical technicians. (DP-E)

- 4614 Brownlee, A.T. Community, culture, and care; a cross-cultural guide for health workers.** St. Louis, Mo., C.V. Mosby, 1978. 297p. Engl. Refs.

This book is intended to provide a readily accessible and practically oriented guide for health workers and students on what they need to learn about both visible and invisible elements of their own culture and organization and the culture of the community around them, why this information is important, and how to go about gathering it. Separate sections cover methods for gathering information, community systems (communication, language, family, politics, economics, education, religion) and their relation to the health programme, and the health system of the community, including traditional medicine. An appendix contains a checklist of general cultural patterns and there is an index. (RMB)

- 4615 Cuba, Ministerio de Salud Pública. Temas populares de salud. (Popular health themes).** Havana, Ministerio de Salud Pública, Dirección de Educación para la Salud, 1975. 95p. Span.

In a simple, straightforward manner, this handbook sets down the facts that the Cuban public should know regarding: the basis of the health services, the polyclinic; antenatal care; care of the newborn; vaccination; nutrition; personal hygiene and community health; dental health; physical exercise; some infectious diseases; intestinal parasitism; cancer; accident prevention; and the blood and blood donation. A glossary of terms is included. (HC-L)

- 4616 de Sagasti, H.E. Educating the public about health through mass media: guidelines for project planning in less developed countries.** Ann Arbor, Mich., Academy for Educational Development, Apr 1976. 23p. Engl.

Available from A.I.D. R and D Report Distribution Center, 300 North Zeeb Road, Ann Arbor, Mich. 48106.

This paper describes guidelines for a multidisciplinary

approach to the use of mass media in health education and calls for the application of educational methods and techniques and of organizational and promotional skills to health problems. The guidelines are based on a social approach, rather than a purely methodological or technological approach; they examine situations when health education is needed and when and how mass media should be used for health education. A discussion of evaluation needs, research data requirements, and the role of test projects is included. (Modified journal abstract.)

- 4617 Eichhorn, R.L., Kulley, A.M.** Purdue University, Department of Sociology, Health Services Research and Training Program, Lafayette, Ind. *Health services data system: the family health survey.* Springfield, Va., National Technical Information Service, Jun 1972. 120p. Engl.

This family health survey manual outlines procedures for conducting a short health interview survey that attempts to measure the community's need for and use of medical services. It includes the survey rationale, an outline of planning issues, and a basic interview questionnaire as well as several standard supplements. Instructions for administering the survey and analyzing the data are also provided. Appendices cover interviewing techniques, card layout and range of legal codes, and national norms from selected basic tables. (DP-E)

- 4618 El Salvador, Programa Nacional de Salud Integral, Programa de Caritas por la Salud y el Bienestar Rural.** *Obligaciones de la promotora juvenil de salud. (Responsibilities of the apprentice health promoter).* Guatemala, Oficina Regional de Catholic Relief Services-USCC para la Salud y la Nutrición, 1974. 16p. Span.

See also entries 4630, 4631, 4632, 4633, 4642, and 4643.

This handbook describes the responsibilities of the apprentice health promoter in El Salvador with regard to home visiting, maternal child health, health and nutrition, etc. The information is conveyed by means of simple illustrations accompanied by minimal written instructions; a separate sheet with a longer written explanation of each duty accompanies the volume. (HC-L)

- 4619 Green, L.W., Wang, V.L., Deeds, S., Fisher, A., Windsor, R.** *Guidelines for health education in maternal and child health.* International Journal of Health Education (Geneva), 21(3), Jul-Sep 1978, Suppl., 1-33. Engl.

Also published in French, German, and Spanish. Guidelines are presented for planning and organizing health education programmes in maternal child health. The major sections of the paper cover the stages of problem diagnosis, planning, organization (including staff training), implementation, and evaluation. Practical examples illustrate each phase. Appendices include a method of assessing health education needs in the community, criteria for effective evaluation, and a suggested rating scale. (FM)

- 4620 Gruson, S.** *Urinary infections.* AFYA (Nairobi), 12, Mar-Apr 1978, 34-39. Engl.

Originally published in French in *Développement et Santé* (Paris).

The symptoms and diagnosis of lower and upper urinary tract infection are described and instructions on checking urine samples for signs of infection, schistosomiasis, tuberculosis, and kidney stones are given. The symptoms of urinary infection in children are also outlined. Physical examination to detect urinary obstructions or malformations is important. Drugs used to treat urinary infections, including sulfonamides, antibiotics, and antiseptics, are listed and a treatment plan is presented. (RMB)

- 4621 Indonesia, Department of Health.** *Appendix V: non-formal education; a programme of cooperation between the government of the Republic of Indonesia and United Nations Children's Fund (UNICEF).* In Primary Health Care: Some Experiences from Indonesia, Jakarta, Department of Health, May 1978, Appendix V, 1-11. Engl.

Unpublished document; see also entries 4066 (volume 6) and 4347.

To facilitate non-formal education activities, the Indonesian government is preparing three sets of learning materials: package "A" for illiterates, new literates, and primary school drop-outs; package "B" for completers of package "A" and drop-outs from junior high schools; and package "C" for drop-outs from senior high schools and completers of package "B" or its equivalent. The contents and methodology of package "A" are outlined. The programme will be implemented by a national coordinating committee and local level resource persons. The organization of the village learning groups and two structured programmes based on the material from package "A" are described. (FM)

- 4622 Instituto Nacional de Medicina y Seguridad del Trabajo, Madrid.** *Trabajo y educación física; normas para la prevención de alteraciones posturales. (Work and physical education; rules for the prevention of postural alterations).* Madrid, Instituto Nacional de Medicina y Seguridad del Trabajo, 1971. 5p. Span.

This pamphlet presents, with illustrations, 11 exercises designed to compensate for postural anomalies assumed in the line of occupational duty. The exercise should help prevent deformity of the vertebral column and, in turn, respiratory difficulties and miscellaneous aches and pains. (HC-L)

- 4623 Instituto Nacional de Medicina y Seguridad del Trabajo, Madrid.** *Postura y esfuerzo; hernias ocasionadas por realizar mal el trabajo. (Posture and effort; hernias caused by poor working habits).* Madrid, Instituto Nacional de Medicina y Seguridad del Trabajo, 1971. 5p. Span.

This illustrated pamphlet explains where and why hernias occur and how they can be avoided through proper posture during the performance of manual labour. (HC-L)

- 4624 Kamm, G.D., Bewes, P.C.** *Ketamine anaesthesia by continuous intravenous drip*. Tropical Doctor (London), 8(2), Apr 1978, 68-72. Engl.

See also entry 4609.

The authors advocate the use of ketamine, which they have found to be safe, effective, and inexpensive, as a continuous intravenous drip. The equipment and methods for the use of ketamine both as a simple drip and with muscular relaxation and artificial respiration are described. They do not recommend that ketamine drip should replace conventional anaesthesia but that it should form part of the armamentarium of the tropical doctor where safety, a simple technology, low capital outlay, and portability are especially desired. Statistical data are included. (DP-E)

- 4625 Kothare, S.N.** *Clinical pathology without microscopy*. Tropical Doctor (London), 8(4), Oct 1978, 207-209. Engl.

Careful examination of a patient's urine, feces, or sputum can yield considerable information regarding his condition. This paper presents a compilation of symptoms and the pathological states that they indicate for the benefit of doctors working with limited laboratory facilities in the developing countries. (HC-L)

- 4626 Manschot, P.** *How to make your own vaccine coolbox*. AFYA (Nairobi), 11, Jul-Aug 1977, 116-118. Engl.

Simplified, step-by-step instructions are given for the construction of an insulated box to be used for transporting vaccines to health centres and clinics. Polystyrene foam sheets used to pack the BCG vaccine supplied by UNICEF are suggested as the ideal insulating material, but sisal fibre, raw cotton, and kapok may be used instead by building a double-walled box and filling the space with the material. Instructions are also given for cooling the box by the simple, inexpensive method of freezing a plastic bottle filled with water. Placed in the box, this will maintain a constant temperature of 4°C, suitable for storing vaccine up to 24 hours. (FM)

- 4627 Morley, D., King, M.** *Spoons for making glucose-salt solution*. Lancet (London), 1(8054), 7 Jan 191(8054), 78, 53-54. Engl.

A set of four coloured measuring spoons has been devised for rural health workers to help them make a glucose-salt rehydration mixture with the correct proportions of ingredients. There are separate spoons for glucose, sodium chloride, sodium bicarbonate, and potassium chloride. The mixture, with or without the water added, can be distributed to the mothers of children with diarrhea or administered by the health post staff. These spoons can be purchased from Teaching Aids at Low Cost, Institute of Child Health, 30 Guilford Street, London WC1N 1EH. (RMB)

- 4628 Proulx, P., Montbourquette, H.** *Algérie, Ministère de la Santé. Institut Technologique de Santé Publique, Oran, Algérie. Texte de puericulture. (Child health text)*. Oran, Algérie, Institut Technologique de Santé Publique, 1976. 85p. Fren.

Unpublished document.

Designed for use in the 1st year of a training course for child health nurses in Algeria, this text covers all aspects of the growth and development of children. Following an introductory section on child care services in Algeria, the 1st chapter traces the stages of growth from birth to adolescence. The 2nd chapter covers each of these stages in detail, concentrating on the newborn and the infant in particular. Dietary needs are described and the advantages of breast-feeding stressed. The physical, nutritional, and emotional needs of the newborn, the infant, the preschooler, and the school-age child are examined. A chart indicating a schedule of vaccinations and immunizations is also given. (FM)

- 4629 Rose, G., Barker, D.J.** *Epidemiology for the uninitiated: rates*. British Medical Journal (London), 2(6142), 30 Sep 1978, 941-942. Engl.

In epidemiology, rates form the basis of comparisons between population groups. Most are expressed as the frequency of an observed state or event over the total number in whom this state or event might occur. This article discusses the choice of the aforementioned denominator, defines the measures of disease frequency, points out the distinction between prevalence and incidence, and explains the difference between crude and specific rates. (HC-L)

- 4630 Rothert, F.C., Chinchilla Aguilar, O.** *Hemorragias y vendajes. (Haemorrhage and bandaging)*. Guatemala, Oficina Regional de Catholic Relief Services-USCC para la Salud y la Nutrición, Serie Primeros Auxilios, Manual No. 4, 1977. 23p. Span.

See also entries 4618, 4631, 4632, 4633, 4642, and 4643.

This first aid manual was prepared for non-medical personnel in areas of Guatemala where health services are not readily available. It explains, by means of simple instructions accompanied by line drawings, how to control bleeding at various points of the body, how and when to administer a tourniquet, and how to apply three types of bandages. (HC-L)

- 4631 Rothert, F.C., Chinchilla Aguilar, O.** *Cuidados sencillos para el enfermo y el accidentado. (Simple care for the victims of illness and accidents)*. Guatemala, Oficina Regional de Catholic Relief Services-USCC para la Salud y la Nutrición, Serie Primeros Auxilios, Manual No. 7, 1977. 31p. Span.

See also entries 4618, 4630, 4632, 4633, 4642, and 4643.

This simply-written, illustrated manual for non-medical personnel sets forward the basic principles of disease prevention, describes the emergency management of pain, rash, fever, diarrhea, blisters, vomiting, poisoning, intoxication, and animal, snake, and spider bites, and explains how to take a patient's temperature, pulse, and respiration and transport the sick or wounded. (HC-L)

- 4632 Rothert, F.C., Chinchilla Aguilar, O. Shock.** (Shock). Guatemala, Oficina Regional de Catholic Relief Services—USCC para la Salud y la Nutrición, Serie Primeros Auxilios, Manual No. 6, 1975. 11p. Span.
See also entries 4618, 4630, 4631, 4633, 4642, and 4643.

By means of simple instructions and line drawings, this handbook explains for the benefit of non-medical personnel in Guatemala the causes, symptoms, and emergency treatment of shock. (HC-L)

- 4633 Rothert, F.C. ed(s).** Oficina Regional de Catholic Relief Services, Guatemala. *Primeros auxilios. (First aid)*. Guatemala, Oficina Regional de Catholic Relief Services—USCC para la Salud y la Nutrición, n.d. 1v. (various pagings). Span.
See also entries 4618, 4630, 4631, 4632, 4642, and 4643.

This packet contains a set of instructions and materials for teaching a first aid course that has been adapted for use in Central America. The course covers burns, artificial respiration, haemorrhages and bandaging, fractures, transporting the wounded, shock, care of illness and accident victims, and emergency delivery. Instructions on how to construct a mannequin for illustrating the technique of artificial respiration are included. (HC-L)

- 4634 Ruiz Gijón, J. Alimentación del trabajador.** (Nutrition for the worker). Madrid, Ministerio de Trabajo, Instituto Nacional de Previsión, 1971. 33p. Span.

In a brief, simple manner, this handbook presents the basic principles of nutrition under these headings: energy requirements, energy in foods, qualitative dietary requirements (protein, vitamins, minerals, etc.), milk, and the seven food groups. A table indicating the composition of Spanish foods in terms of protein, calories, fats, vitamins, and minerals is included. Although mostly concerned with working men, the book also gives some attention to women and children. (HC-L)

- 4635 WHO, Geneva. Growth chart for international use in maternal and child health care: guidelines for primary health care personnel.** Geneva, WHO, 1978. 36p. Engl. Refs.

This growth chart provides a simple, effective means of monitoring child health and nutritional status. It also serves as a useful visual instrument for the health worker to use in educating the mother and family about the consequences of an inadequate diet and infectious diseases. The 1st part of this guidebook presents background information on the development and evaluation of the growth chart designed by WHO, along with detailed descriptions of its contents and use. The 2nd part includes a model chart, easily adaptable to local needs, and more simplified instructions for use by primary health workers. (FM)

- 4636 WHO, Geneva. Lay reporting of health information.** Geneva, WHO, 1978. 27p. Engl.

Lay reporting is the collection of information on health problems or health care systems management by lay or paramedical personnel with traditional or elementary medical training. This report discusses the historical background of lay reporting, the uses and users of data collected, data producers, the content and structure of the detailed list of symptom associations for lay reporting (the list itself is included), recording and coding information, reporting forms, age grouping, and the introduction of a lay reporting system. Other forms and lists (death record, patients' register, minimal mortality and morbidity lists) with instructions are appended. (RMB)

- 4637 WHO, Geneva. Surveillance of drinking-water quality.** Geneva, WHO, 1976. 135p. Engl. 50 refs.

Without proper surveillance, an otherwise safe water supply may become an effective channel for spreading disease. This monograph on surveillance techniques is intended for use by public health officials responsible for the production and distribution of drinking water, engineers or sanitarians engaged in public health or water supply activities, water treatment plant operators, and other persons who have a professional interest in water supply. It contains information and guidelines for planning, organizing, and operating programmes for surveillance of drinking water quality at the national or regional level in developing countries. (DP-E)

- 4638 WHO, Manila. Workshop on the Development of Education and Information Materials on Family Health; final report.** Manila, WHO, Feb 1974. 83p. Engl.

Workshop on the Development of Education and Information Materials on Family Health, Nuku'alofa, Tonga, 4-18 Oct 1973.
Microfiche only.

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 the preparation of such materials, so that they would link maternal and child health with family planning; prepare such materials adapted to the local conditions in the countries of the South Pacific and the methods of their distribution, dissemination, and utilization; and consider the necessary orientation and training of personnel involved in the use of these materials. The workshop focused on the need for an integrated approach to family health. Appendices include the list of participants, statistical information on selected items for the countries represented in the workshop, and examples of the educational and information materials developed at the workshop. (Modified journal abstract.)

- 4639 Willis, M., McLachlan, M.E. Medical care in schools.** London, Edward Arnold, 1977. 216p. Engl.

This handbook for public school teachers covers many of the medical problems that may be encountered among

schoolchildren, particularly in the UK. Separate chapters deal with medical information, school procedure, the medical/rest room, administration, first aid in accidents, common and unusual emergencies, infectious diseases, handicapped children, skin conditions, parasitic diseases, feet, minor development problems, smoking, alcohol, drugs, non-accidental and psychological injury to children, immigrant children, safety and comfort in school, school journeys, careers advice, and useful addresses. An index is included. (RMB)

- 4640** Yang, P.R. *Guide pour la santé scolaire et universitaire en Afrique. 2e édition. (Guide for school and university health in Africa. 2 edition).* Yaoundé, Centre d'Édition et de Production de Manuels et d'Auxiliaires de l'Enseignement, 1977. 158p. Fren.

A summary of the basic principles of school health, this handbook was designed for use in medical training programmes in Africa. The basic stages of child development and growth are outlined and the techniques of physical examination and the role of school visits in diagnosing diseases are considered. A 4th chapter discusses disease control in schools and covers the transmission of disease and protection through immunization. The psychological development of children is described in detail, including the administration of various psychological tests. Nutrition in the school is also examined. The book concludes with a chapter on hygiene and sanitary education that provides practical suggestions for the construction of sanitary facilities. (FM)

- 4641** Zeltner, J.M., Ghesquière, P. *Latrines et péril fécal. (Latrines and the fecal peril).* Développement et Santé (Paris), (14), 1978, 15-22. Fren.

Following a description of the role played by human wastes in the transmission of disease by water, contact, flies, and the soil, the importance of sanitary latrines is emphasized. Any programme of latrine construction must be preceded by a campaign to educate both the community and the individual family in hygiene and ensure their support. Detailed information on constructing pit latrines is given, including guidelines for choosing the best site, determining the depth of the pit according to users and expected length of use, and choosing the best materials to construct the platform. After 1 year, the decomposed waste material can be recycled as fertilizer. (FM)

IV.7.2 Family Planning and Midwifery

See also: 4633.

- 4642** El Salvador, Programa Nacional de Salud Integral, Programa de Caritas por la Salud y el Bienestar Rural. *Cuando se espera un niño. (When a baby is expected).* Guatemala, Oficina Regional de Catholic Relief Services—USCC para la Salud y la Nutrición, Librito No. 1, 1974. 10p. Span.

See also entries 4618, 4630, 4631, 4632, 4633, and 4643.

This booklet, intended for the Guatemalan public, explains by means of simple line drawings how to keep healthy during pregnancy, the development of the fetus during pregnancy, and indications for calling a doctor during pregnancy. A separate sheet containing a written commentary on each illustration accompanies the booklet. (HC-L)

- 4643** El Salvador, Programa Nacional de Salud Integral, Programa de Caritas por la Salud y el Bienestar Rural. *Nació el niño. (Child is born).* Guatemala, Oficina Regional de Catholic Relief Services—USCC para la Salud y la Nutrición, Librito No. 2, 1974. 8p. Span.

See also entries 4618, 4630, 4631, 4632, 4633, and 4642.

This booklet, intended for new parents in Guatemala, presents, in pictorial form, advice on the care of the mother and newborn. It covers such topics as hygiene, infant feeding, rest, nutrition, checkups, etc., and is accompanied by a set of verbal explanations corresponding to each picture. (HC-L)

- 4644** Law, B. *Family planning in nursing.* London, Crosby Lockwood Staples, 1973. 84p. Engl.

The purpose of this British textbook is two-fold: to introduce nurses to the various methods of birth control, including the relative effectiveness, side effects, and practical advantages and disadvantages of each, and to anticipate many of the questions, prejudices, and anxieties that they will encounter in advising couples on the subject of contraception. An index of related terms is included. (HC-L)

V Formal Evaluative Studies

V.1 Health Manpower

See also: 4233, 4490, 4503, 4562, 4564, 4565, 4567, 4586, 4601.

- 4645 Berman, P.A.** *Village health workers in developing countries: evidence of effectiveness and efficiency.* Ithaca, N.Y., Cornell University, Aug 1979. 172p. Engl. Refs.

Thesis presented to the Faculty of the Graduate School of Cornell University, Aug 1979, in partial fulfillment of the degree of Master of Science.

After a brief introduction, chapter 2 of this thesis examines health and health services in developing countries and introduces the issue of primary care. Community participation, costs and financing, and services provided by village health worker (VHW) projects are the subject of chapter 3. Chapter 4 attempts to evaluate the VHW alternative by applying a model for health service effectiveness and efficiency, while chapter 5 assesses specific VHW projects: village health cadres in Indonesia, the KAVAR project in Iran, community health aides in Jamaica, and rural health promoters in Guatemala. Statistical data are included. (RMB)

- 4646 Chambers, L.W., Bruce-Lockhart, P., Black, D.P., Sampson, E., Burke, M.** *Controlled trial of the impact of the family practice nurse on volume, quality, and cost of rural health services.* Medical Care (Philadelphia, Pa.), 15(12), Dec 1977, 971-981. Engl. 20 refs.

Two Newfoundland (Canada) communities in an isolated rural area served by a 40-bed hospital staffed by salaried physicians, one with and one without expanded role nurses, are compared. Primary care visits, mainly preventive, in the former increased by 186% after the establishment of the family practice nurse community clinic and attendance at the hospital decreased by 35%. Acute care days in hospital decreased by 5% in the experimental group compared to a 39% increase in the control group, while the total annual health service cost rose 26% compared to 21%. The nurses were just as competent as the physicians in managing drugs and diagnosing common conditions. (Modified journal abstract.)

- 4647 Corser, C.M., Ryce, S.W.** *Community mental health care: a model based on the primary care team.* British Medical Journal (London), 2(6092), 8 Oct 1977, 936-938. Engl. 16 refs.

Evaluation of a community mental health care team in Scotland showed that the team approach to psychiatry

can be effective. Consisting of a consultant psychiatrist, a general practitioner psychiatrist, and a psychiatric nurse, the team held weekly meetings also attended by a psychologist and a social worker. Since the scheme started in 1974, referral to the psychiatrists have steadily increased from 20 per year to 72 in 1976. Of the patients seen by the psychiatrists, 44% were also seen by the nurse. Close cooperation with the community health centre and general practitioners is an integral part of the programme's success. (FM)

- 4648 Feuerstein, M.T.** *Educative approach in evaluation: an appropriate technology for a rural health programme.* International Journal of Health Education (Geneva), 21(1), Jan-Mar 1978, 56-64. Engl.

—An evaluation of female rural health promoters in Olancho, Honduras, conducted in December 1976, shows the advantages of an evaluation that is carried out by the promoters themselves. The methodology placed great importance on local context, self-help, and the abilities of the participants. Reports were made and the results classified into three areas: health and related problems, relations between the programme and the community, and the background and training of the promoters. Recommendations resulting from the evaluation emphasized further training in fields such as midwifery and child care, better record-keeping, greater community support (especially from husbands), and more cooperation with regional agencies. (FM)

- 4649 Fine, L.L.** *Pediatric practice of the child health associate.* American Journal of Diseases of Children (Chicago, Ill.), 131(6), Jun 1977, 634-637. Engl. 21 refs.

After completing a 3-year course at the University of Colorado School of Medicine (USA), child health associates (CHAs) are certified by the State Board of Medical Examiners to practice pediatrics under physician supervision. A review of 2 363 CHA/patient encounters in various ambulatory settings revealed that physician consultation was requested in only 203 (8.6%) of them, either to confirm findings (135 or 5.7%), provide a more detailed assessment (18 or 0.8%), reassure the patient (17 or 0.7%), or for a combination of these reasons (33 or 1.4%). It is concluded that CHAs can, without direct physician supervision, provide primary care to over 90% of ambulatory pediatric patients, that their deployment results in substantial saving of physician time, and that their role and skills are acceptable to the patient. (HC-L)

- 4650 Hall, E.L.** *Study of the health manpower resources in a primary health centre in rural India with reference to the utilisation of auxiliaries in providing health care.* Liverpool, UK, Liverpool School of Tropical Medicine, Department of Tropical Community Health, 7 Oct 1977. 105p. Engl. 30 refs.
Unpublished document; thesis presented to the Liverpool School of Tropical Medicine, Liverpool, UK, 7 Oct 1977.

To determine the role of auxiliary health workers in health services delivery, the functions and performance of all staff members in a rural Indian primary health centre were examined by means of a questionnaire, on-the-job observation, and a review of health centre records. It was found that duties of some auxiliaries overlapped and that the two medical officers spent most of their productive time treating minor illnesses. It is suggested that auxiliaries be trained to perform the minor curative tasks, which would leave the medical officers more time for supervisory and preventive work. Thirteen tables of data are included and discussed. (HC-L)

- 4651 Hannay, D.R.** *Paramedical training in Guyana and the future of medical auxiliaries.* Tropical Doctor (London), 8(3), Jul 1978, 146-149. Engl. Refs.

The present state of paramedical training in Guyana is examined. The three training programmes now in operation are described; these include the 2-year medical technology course, the 3-year pharmacy diploma course, and the 4-year medical auxiliary diploma programme. Some of the problems relating to job satisfaction, expectations, status, and attitudes in the case of medical auxiliaries are discussed. It is felt that they have a greater role to play, not as substitute doctors in clinical medicine, but as community health workers and leaders of health teams with ample opportunity for continuing education. (FM)

- 4652 Launer, J.** *Taking medical histories through interpreters; practice in a Nigerian outpatient department.* British Medical Journal (London), 2(6142), 30 Sep 1978, 934-935. Engl.

In order to assess the performance of interpreters at the outpatient department of a Nigerian hospital, a number of consultations were taped, translated, and analyzed. The analyses revealed that interpreters sometimes summarized information in a confusing or incorrect manner and were inclined to conduct much of the consultation themselves. It is therefore recommended that hospitals using interpreters ensure that they have some training in language and interpretation, are continuously assessed, and are given no conflicting duties such as history-taking. Advice for doctors using interpreters is included. (HC-L)

- 4653 Rosen, C.E., Copp, W.M., Holmes, S.** *Effectiveness of a specially trained pharmacist in a rural community mental health center.* Public Health

Reports (Rockville, Md.), 93(5), Oct 1978, 464-467. Engl. 8 refs.

Specially trained pharmacists working in rural community mental health centres in the USA generally have a doctorate in pharmacy and extensive training in psychopharmacology, psychopathology, interviewing techniques, and psychotherapy. Besides being responsible for in-house medications, these pharmacists spend time in outpatient drug maintenance clinics with chronic psychiatric patients. This article describes a survey undertaken in Georgia to assess the quantity and relative cost of the pharmacist's services, which were judged comparable to those of a psychiatrist. Statistical data are included. (DP-E)

- 4654 Simborg, D.W., Starfield, B.H., Horn, S.D.** *Physicians and non-physician health practitioners: the characteristics of their practices and their relationships.* American Journal of Public Health (New York), 68(1), Jan 1978, 44-48. Engl. 15 refs.

Six US primary care practices that utilize both physician and non-physician practitioners were studied to measure differences in the care provided by each type of practitioner. By chart review, 1 369 patient-practitioner encounters were examined. Physicians identified fewer symptoms and signs in their patients and prescribed fewer non-drug therapies than did non-physicians; they were also less likely to follow-up their patients unless they saw them more than once. These and other findings indicate that the skills of physicians and non-physicians are potentially complementary, although physicians do not often take advantage of this potential. Statistical data are included. (Modified journal abstract.)

- 4655 Skelton, M.B., McSwain, N.E.** *Study of cognitive and technical skill deterioration among trained paramedics.* Journal of the American College of Emergency Physicians (East Lansing, Mich.), 6(10), Oct 1977, 436-438. Engl.
University Association for Emergency Medicine Annual Meeting, Kansas City, Mo., May 1977.

In order to study cognitive and technical skill deterioration, 30 paramedics were given the same examinations they had taken at the end of their training 6-30 months earlier. A comparison of the scores showed that the skills requiring the most technical knowledge deteriorated most rapidly. Also, basic skills, despite frequent use in the field, had deteriorated. The amount of deterioration was greatest among the group that had completed their training 30 months prior to this study. A recommendation is made for in-service and continuing education. Statistical data are included. (DP-E)

- 4656 Wang, V.L.** *Changing nutritional behavior by aides in two programs.* Journal of Nutrition Education (Berkeley, Cal.), 9(3), Jul-Sep 1977, 109-113. Engl. 13 refs.

Two US social programmes, the Expanded Food and Nutrition Program and the Family Aide Program, deploy indigenous aides to work with disadvantaged homemakers: the aides are trained in nutrition education, consumer education, and child development, respective-

ly. A 5-year study was undertaken to determine the relative effectiveness of single-purpose versus multipurpose aides and the most efficient way of training and utilizing them. This paper discusses the study findings and suggests that a broader-based, more extensive training programme in health education, modeled after that of the practical nurse, would better meet the needs of the programmes, the community, and the aides. (HC-L)

- 4657 Wright, N.H., Sujpluem, C., Rosenfield, A.G., Varakamin, S.** *Nurse-midwife insertion of the Copper T in Thailand: performance, acceptance, and programmatic effects.* *Studies in Family Planning* (New York), 8(9), Sep 1977, 237-243. Engl. 14 refs.

In order to determine the safety, acceptability, and programmatic effects of deploying nurse-midwives as IUD insertors, 40 nurse-midwives from 32 rural Thai clinics were given a 6-week training course in the insertion of the TCu-200 (Copper T). Two years later, a systematic survey of 33% of their acceptors compared with similar data from physician insertions revealed: that nurse-midwife insertion was technically safe, without unduly high levels of early side effects, and associated with high continuation rates; that acceptors preferred female professionals, although not necessarily nurse-midwives, over male professionals; and that allowing trained nurse-midwives to insert IUDs considerably increased the number of acceptors. Thailand has since adopted a 3-year programme to train all nurse-midwives in insertion techniques. (HC-L)

- 4658 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.

In order to alleviate rural health manpower shortages, Iran has recently begun to import physicians from India, Pakistan, and the Philippines. This 1977 survey indicated that the physicians are willing to accept these posts because the salaries are high and they consider it a move westward. However, the same study revealed that the rural Iranian consumer was far more likely to prefer an Iranian auxiliary to a non-Iranian physician. The author suggests that auxiliary training programmes are a cheaper and more effective solution to the manpower shortage than physician importation. Statistical data are included. (DP-E)

V.2 Organization and Administration

See also: 4239, 4481.

- 4659 Asia Foundation, San Francisco.** *Japanese rural health delivery system, a study.* San Francisco, Asia Foundation, Oct 1974. 1v.(various pagings). Engl.

In this study of the evolution of rural medical care in Japan, the pre-war situation, the post-war period, and the history of the national health insurance system are

examined. Increased emphasis on the clinical approach, improved access to medical facilities, and expansion of the role of community nurses are some of the important features. The integration of public health with other aspects of social and economic development is also a factor in the improved health status of the Japanese. An increased reliance on the private sector resulting in poor distribution of services are some of the disadvantages of the system. The applicability of the Japanese experience to other developing countries is also discussed. Statistical data are included. (FM)

- 4660 Baskett, T.F.** *Obstetric care in the central Canadian Arctic.* *British Medical Journal* (London), 2(6143), 7 Oct 1978, 1001-1004. Engl.

All pregnancies occurring from 1971-1975 among 4 000 Canadian Eskimos living in isolated settlements in the Keewatin district (North West Territories) were reviewed. Obstetric care was provided in settlement nursing stations, at a base hospital staffed by general practitioners, and at a Winnipeg teaching hospital. Of 622 deliveries, 218 took place at nursing stations under the supervision of midwives, 338 in the base hospital, and 54 in the teaching hospital. Perinatal mortality was 25.7: 1 000 births; this low rate can be attributed to the skill and experience of the midwives, a liberal evacuation policy, close general practitioner involvement, and a specialist visiting and consultation service. Statistical data are included. (Modified journal abstract.)

- 4661 Butt, H.W.** *Indo-Dutch Project for Child Welfare.* In *Alternative Approaches to Health Care*, New Delhi, Indian Council of Medical Research, 1976, 33-44. Engl.
Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.
For complete document see entry 4254.

The Indo-Dutch Project for Child Welfare was begun in 1969 in Hyderabad, India, to explore ways of increasing the effectiveness of existing child health services. In 1972, the project was expanded to include training and preschool education programmes and to encourage public participation in nutrition programmes and self-help schemes. The author examines in detail the project's involvement with: training auxiliary nurse-midwives, *dais*, and village health workers; the production of a protein packet called Hyderabad Mix; family planning services; nursery schools and a creche; women's clubs; dairy farming and poultry projects; a nutrition demonstration unit; etc. (RMB)

- 4662 Chowdhury, Z.** *Paramedics of Savar: an experiment in community health in Bangladesh.* *Development Dialogue* (Uppsala, Sweden), 1, 1978, 41-50. Engl.

The People's Health Centre, established at Savar, Bangladesh, in 1972, has gained an international reputation as an example of integrated approach to health problems. The programme owes much of its success to its paramedics or community health workers, the majority of whom are local women with little training. Local families bear 40% of the programme's cost, which enables

health care to be extended to poor people who are unable to contribute financially. Some of the problems, successes, and failures of the programme are discussed. (DP-E)

- 4663 Christiansen, N., Vuori, L., Clement, J., Herrera, M.G., Mora, J.O.** *Malnutrition, social environment and cognitive development of Colombian infants and preschoolers.* Nutrition Reports International (Los Altos, Cal.), 16(1), Jul 1977, 93-102. Engl. 14 refs.

A sample of 87 Colombian infants aged 6-20 months and 147 preschoolers aged 3-5 years, half of whom showed mild to moderate deficits in length and weight, were surveyed to test the association between malnutrition and mental development. Among infants, the Escalona-Corman Spatial Relations Scale and the Griffiths Test of Mental Abilities were significantly associated with standard length after controlling for social variables. The Griffiths Test and a test of vocabulary were significantly associated with standard length in the preschool sample. Statistical data are included. (DP-E)

- 4664 Cordes, S.M.** *Opinions of rural physicians about their practices, community medical needs, and rural medical care.* Public Health Reports (Rockville, Md.), 93(4), Jul-Aug 1978, 362-368. Engl. 40 refs.

Interviews of 41 rural general practitioners (GPs) in the state of Washington, USA, were conducted from 1971-1973. The GPs were asked their opinions about their present practices, the medical care needs of their communities, and rural health care in general. While many enjoyed the variety of problems confronted, most expressed frustration at the excess work, demands, and responsibilities they faced. More doctors and more adequate facilities were most often cited as the communities' greatest needs. Most GPs felt that urban medical care in the state was superior to rural medical care. Statistical data are included. (DP-E)

- 4665 Crane, D.** *Technological innovation in developing countries: a review of the literature.* Research Policy (Amsterdam), 6(4), 1977, 374-395. Engl. 102 refs.

A survey of recent literature on the role of science and technology in developing countries reveals that inadequate linkages between institutions in the various sectors of developing societies have inhibited the development and utilization of indigenous technological innovations. Recent attempts to rectify this problem by creating new types of university research institutes and government coordinating agencies are discussed. A sociological approach based on interorganizational analysis is suggested for future studies. This literature identifies the optimal characteristics of coordinating governmental organizations and of research utilization systems that link research organizations to their clients at the local level. (Modified journal abstract.)

- 4666 Dissevelt, A.G.** *Integrated maternal and child health services: a study at a rural health centre in*

Kenya. Amsterdam, Krips Repro Meppel, Dec 1978. 208p. Engl. Refs.

See also entry 4061 (volume 6).

A before-and-after study, aimed at improving the utilization and coverage of maternal child health (MCH) services through more efficient use of available resources and the application of modified operating and technical procedures, was carried out at the health centre at Masii, Kenya, from 1970-1975. This document: reviews literature relevant to the organization and operation of MCH services in rural areas, with emphasis on anglophone African countries; describes the study area and its population; justifies and describes the modified operational system; presents the study methods, materials, results, and conclusions; and discusses the implications of the study results for the planning and management of MCH services, the training of staff, and research. Statistical data are included. (HC-L)

- 4667 Erinosh, O.A.** *Mental health delivery-systems and post-treatment performance in Nigeria.* International Journal of Social Psychiatry (London), 24(1), Spring 1978, 71-74. Engl. 9 refs.

All mental health delivery systems fall into one of two broad categories: institutional (hospital-based) and community-based. An examination of the post-treatment outcomes of psychiatric patients who were admitted to one of each of these types of psychiatric centres in Nigeria indicated that a slightly larger proportion of institutional patients were rehospitalized, the average length of stay was longer in the community centre, and the average length of stay in the post-treatment community prior to 2nd admission was much longer for the community patients. Many variables are involved and more study is needed. Statistical data are included. (DP-E)

- 4668 Escudero, J.C.** *Magnitude of malnutrition in Latin America.* International Journal of Health Services (Westport, Conn.), 8(3), 1978, 465-490. Engl. 40 refs.

Latin American methods of recording information on malnutrition and its relation to morbidity and mortality are criticized. It is suggested that a great number of malnutrition-caused deaths are unrecorded. At fault are the inaccuracy and incomplete coverage of vital statistics coupled with the low population coverage by health care systems. This inadequacy is linked to the ideological bias of the statistical systems used, which, it is felt, have little relevance to the Latin American situation. Poverty, increasing inequality of income distribution, and replacement of subsistence agriculture by industrial agricultural geared towards export are given as the major causes of malnutrition. (FM)

- 4669 Forrester, R.H.** *Improved delivery of health care to the medical indigent in Bexar county; a demonstration.* Springfield, Va., National Technical Information Service, May 1973. 88p. Engl. 9 refs.

A 1970-1973 project designed to improve the delivery of health care to the economically deprived population of

the Bexar County Hospital District (Texas, USA) included the renovation and conversion of the hospital emergency room into a walk-in clinic and the establishment of a medical follow-up programme consisting of a new clinic to aid patients with chronic medical disease through the use of physician extenders and a satellite clinic to provide chronic medical disease follow-up care utilizing public health nurses as physician extenders. Statistical data are included. (Modified journal abstract.)

- 4670 Gross, R.J.** *Primary health care: a review of the literature through 1972.* Medical Care (Philadelphia, Pa.), 12(8), Aug 1974, 638-647. Engl. 104 refs.

In reviewing the literature on primary health care, the author finds that end result studies are sparse and inconclusive and it is not clear what kind of primary care is superior. Many variables such as age, sex, education, and socioeconomic status have not been controlled adequately in the studies. There is also a scarcity of data on nonclinical types of primary care. He recommends more research in this area, as well as studies to confirm process data and obtain end-result data for clinic populations. (DP-E)

- 4671 Heller, P.S.** *Issues in the allocation of resources in the health sector of developing countries.* Ann Arbor, Mich., University of Michigan, Center for Research on Economic Development, Discussion Paper No. 67, Feb 1977. 33p. Engl. 11 refs.

The pattern of resource allocation in the health sector of developing countries often suggests excessive distortions in the balance between expenditure interregionally and between rural-urban areas. This reflects the reliance on a "medical referral system." This paper examines the theoretical rationale underlying such a system and argues that policy analysis must examine the operating characteristics of such a system in order to appraise its efficiency and equity. As a case study, the Tunisian system is evaluated in terms of the distribution of resources, structure of referral capacity, and the extent of actual referral. (Modified journal abstract.)

- 4672 Isely, R.B., Martin, J.F.** *Village health committee; starting point for rural development.* WHO Chronicle (Geneva), 31(8), Aug 1977, 307-315. Engl.

Also published in French, Russian, and Spanish. The successes and failures of recent community development projects have highlighted the fact that lasting results can only be achieved with the active participation of the community itself. In the health sector, as in other areas, working for the people is bound to be less fruitful than working with informed, active participants in the development process. In Cameroon, the community participation approach was successfully used to organize village health committees. The accomplishments of these committees (latrine construction, water source protection, etc.) were gratifying in themselves, but equally important was the catalytic effect that commu-

nity organization seemed to have on other aspects of rural life and the stimulus it provided to community development. (Modified journal abstract.)

- 4673 Islam, K.** *Alternative organizational schemes for primary health care with special reference to Bangladesh.* Dacca, Gono Sasthaya Kendra, 19 Jul 1977. 14p. Engl. 31 refs. Unpublished document.

In reviewing alternative organizational schemes for primary health care, the author outlines the situation in Bangladesh. He discusses medical education, unchanged since 1948, which takes little account of the health problems of the poor and ignores tropical diseases, the leading cause of mortality in that country. Nutrition programmes need to be expanded to reach a greater percentage of the population and reduce the high incidence of malnutrition. The integration of health services and family planning, the utilization of village health workers and paramedics, and the role of rural health centres are also covered. The author advocates public participation through payment of health insurance as a supplement to government contributions. (Modified journal abstract.)

- 4674 Molina G., G.** *Tendencias internacionales en la organización de servicios de salud, con especial referencia a la experiencia de Chile, 1925-73 y Medellín, IOPAA, 1975.* (International trends in the organization of health services, with special reference to the experience of Chile, 1925-1973 and Medellín, IOPAA, 1975). Revista de la Escuela Nacional de Salud Pública (Medellín, Colombia), 1(2), Jan-Jun 1975, 49-55. Span. 13 refs.

Three movements can be considered characteristic of modern medical care: the integration and regionalization of medical and health services, the participation of the community in its own health care, and the delegation of functions from the higher to the lower levels of health personnel. This paper discusses the origins of these movements and the extent to which they have made themselves felt in the Chilean and Colombian health services, pointing out the political and structural obstacles to their fullest expression. (HC-L)

- 4675 New, P.K., New, M.L.** *Reflections on health care in China: lessons for the West.* Comparative Medicine East and West (New York), 6(1), 1978, 15-22. Engl. 31 refs.

The authors examine health care in the People's Republic of China with reference to ideas and practices that could be considered by Western countries aiming to improve the delivery of health care. They note the social and political differences between China and the West but identify four areas where the Chinese model may be applicable: tighter and more regulated controls over budgetary matters and distribution of health services, closer monitoring of health services where local control is inadequate, more generalized training of health personnel, and the legitimization of pluralistic forms of health care. (DP-E)

- 4676 Ostendorf, D., Hammerschlag, C.A.** *Indian-controlled mental health programme.* Hospital and Community Psychiatry (Washington, D.C.), 28(9), Sep 1977, 682-685. Engl.

In 1971, the Apache Indians began operating a community mental health centre on a reservation in northeastern Arizona (USA). The tribal council appointed a 14-member board composed mainly of Apaches to administer the centre; the board then hired an executive director who was not an Indian. There were 15 professional and paraprofessional staff members, of whom 12 were Indians. In January 1976, the tribal council fired the director and disbanded the board of directors, although the clinic continued operating. The authors discuss sociocultural factors that influenced the centre's development and give several reasons for its problems, including the general expectation that agencies run by Indians will not be successful. (Modified journal abstract.)

- 4677 Radnaabazar, J.** *Pediatrics and problem of child health care in Mongolia.* Indian Pediatrics (Calcutta, India), 14(11), Nov 1977, 871-874. Engl.

This article briefly describes the major activities that have been carried out since 1921 in the field of pediatrics and child health in Mongolia. In particular, it notes the improvement of child health institutions (hospitals, kindergartens, creches, etc.) and shows that infant mortality has been significantly reduced from 500-60.3:1 000 live births. Statistical data are included. (Modified journal abstract.)

- 4678 Ramaseeta, T., Samputtavanich, S., Ochasan-ondha, P., Ito, T.** *Results of five years of integration of leprosy control into the provincial health service of Phuket Island, Southern Thailand.* Leprosy Review (London), 48(4), Dec 1977, 261-268. Engl.

During a 5-year period in Phuket Island, Thailand, a total of 253 cases of leprosy were detected. In 1972, a survey team from the Leprosy Division of the Thai Ministry of Health found 87 cases (34.39%) and in 1976 they discovered a further 54 (21.3%) in a 2nd survey. At the same time, local health workers were able to diagnose 112 cases (44.24%) on their own. While the authors feel that the local workers' diagnostic abilities are very valuable, it is important to conduct adequate case-finding programmes before integration of leprosy control into the local health service; regular supervision and field guidance are also necessary. Statistical data are included. (DP-E)

- 4679 Reid, R.A.** *Simulation and evaluation of an experimental rural medical care delivery system.* Socio-Economic Planning Sciences (Oxford, UK), 9, Jun 1975, 111-119. Engl.

A computer simulation model for evaluating recommended changes in the operation of a rural medical care system in New Mexico (USA) imitates the processing of patients at a rural clinic staffed by a family nurse practitioner and a laboratory aide who are linked by a communications system to supervisory physicians at an urban

medical centre. The model describes the patient-nurse practitioner-physician interactions that affect the efficiency of the system. Simulated results of four experiments reflecting the influence of alternative policies show that streamlining the communication process between nurse and physician should yield reductions in patient processing times. (Modified journal abstract.)

- 4680 Sánchez L., J.R.** *Consideraciones generales de la salud en Guatemala. (General considerations regarding health in Guatemala).* Revista Centroamericana de Ciencias de la Salud (San José), 2(4), May-Jun 1976, 97-120. Span.

A review of Guatemala's health situation and its determinants, health services, and health expenditure leads to these conclusions: Guatemala exhibits the classic disease profile of a Third World country; expenditure on health by the public sector is imperfectly known and, by the private sector, unknown; lack of national laboratories results in continued dependence on multinational drug companies; and health services could be improved by better intra- and intersectorial coordination. Statistical data and other relevant background information are annexed. (HC-L)

- 4681 Snodgrass, D.R.** *Family planning program as a model for administrative improvement in Indonesia.* Cambridge, Mass., Harvard University, Harvard Institute for International Development, Development Discussion Paper No.58, May 1979. Iv.(various pagings). Engl.

The highly successful family planning programme in Indonesia could be used as a model for improving public administration generally in that country. In assessing the unique features of this programme, the author stresses decentralization, local participation, use of advertising-type techniques, a strong budgeting system, and a good logistical system. Certain external features not always present in other projects may also have contributed to its success, such as the newness of the programme, strong foreign support, and a high level of national commitment. However, it is still the administrators themselves who were most responsible for the programme's success. (FM)

- 4682 Stephens, B.** *Simplified health information system for outpatient services.* Annals of Tropical Medicine and Parasitology (Liverpool, UK), 72(1), 1978, 97-98. Engl.

After a year of research including clinical trials and intensive evaluation, a simple but comprehensive information system was developed in Botswana that relies primarily on patient-retained health cards. These time-saving cards provide essential patient and service data; they contain: a space for recording the on-going treatment of malaria, tuberculosis, and family planning patients; a weight chart to indicate at-risk children; and a number of other features. Only 0.04% of patients in a rural clinic and approximately 0.01% of children and 0.02% of adults in larger villages and towns failed to bring their health cards when they returned to the clinic. (AF)

V.3 Planning

- 4683 Bersh Escobar, D.** *Consideraciones para una política hospitalaria en Colombia (una investigación sobre las bases históricas del problema hospitalario).* (Thoughts on a hospital policy for Colombia (an enquiry into the historical bases of the hospital problem)). Revista de la Escuela Nacional de Salud Pública (Medellín, Colombia), 1(3), Jul-Dec 1975, 102-110. Span.

Attempts to improve Colombia's hospital services both quantitatively and qualitatively have met with limited success, mainly because they have tended to focus on the administrative and technical aspects of the problem rather than the financial ones. This document shows how, since 1938, bureaucrats have repeatedly come up with the same recommendations and solutions *vis-à-vis* the hospital question and why these proposals have yet to achieve the desired effect. (HC-L)

- 4684 du Bois, V.D.** *Drought in West Africa: temporary famine or chronic deficiency?* Common Ground (Hanover, N.H.), 1(3), Jul 1975, 35-44. Engl.

An assessment of the long-term effects of the drought in the Sahel on the economic development of Mali indicates an urgent need for an overall water resources management programme. Government policy, which neglected agricultural development in favour of industrialization for which the country lacked the infrastructure, must be corrected. Various internationally-supported relief projects now underway are also described. Construction of dams and improvements to road systems, transportation facilities, and food storage capabilities will, if continued financial support is obtained, limit the effects of the drought and prevent further disasters. (FM)

- 4685 England, R.** *More myths in international health planning.* American Journal of Public Health (New York), 68(2), Feb 1978, 153-159. Engl. 48 refs.

Several oversimplifications concerning health planning in developing countries have gradually obscured the major issues. The myth of putting the rural area first ignores the realities of massive urban growth. The idea that diseases in poor countries are easily treated hides the necessity of understanding the complicated social, cultural, and economic factors behind health problems. The referral system of health care is, in most cases, a failure, because coverage is inadequate. Compulsory rural service for medical personnel is also unrealistic, as is the theory of obtaining competent auxiliary workers at low pay. Planners must understand that these issues belong more to the realm of social structures than to that of bio-medicine. (FM)

- 4686 Maasdorp, G.** *Restructuring the health sector in developing countries; a review article.* South African Journal of African Affairs (Pretoria, South Africa), 6(1-2), 1976, 79-86. Engl. See also entry 1514 (volume 3).

This paper summarizes, discusses, and compares the health sector policies that are outlined in two books: Gish, O., *Planning the Health Sector: the Tanzanian Experience*, London, Croom Helm, 1975, 209p., and World Bank, *Assault on World Poverty: Problems of Rural Development, Education, and Health*, Baltimore, Maryland, John Hopkins University Press, 1975, 425p. It is observed that, although the Tanzanian policy is influenced by the socialist philosophy of development and the World Bank's policy reflects the growing emphasis on welfare distribution rather than economic growth, the two are in substantial accord with regard to the broad strategy that is considered appropriate to health services development in a developing country. (HC-L)

- 4687 Quadeer, I.** *India's feeding programmes and their relevance.* Social Science and Medicine (Oxford, UK), 12(1C/2C), Jun 1978, 23-27. Engl. 22 refs.

Despite the popular belief that India's food shortages are due to overpopulation and traditional farming methods, the author maintains that India could provide 90% of its food needs were it not for maldistribution and misuse of available supplies. Feeding programmes intended to correct these imbalances have not even reached 3% of the vulnerable population due to the government's failure to mobilize and allocate resources. To be successful, nutrition programmes must acquire an epidemiological perspective, be integrated with the regular health services infrastructure, and define their target populations. However, socioeconomic development and not nutrition programmes is the real solution to malnutrition. (DP-E)

- 4688 Rodríguez de Sutter, M.I.** *Diagnóstico de salud de la población salvadoreña. (Health status of the Salvadorean population).* Revista Centroamericana de Ciencias de la Salud (San José), 1(1), May-Aug 1975, 131-149. Span.

This paper examines in detail demography, environmental health, morbidity, mortality, infant mortality, and oral health in El Salvador. Poor performance in alleviating problems in all of these areas is attributed to the government's failure to formulate a national health policy aimed at solving them in a coordinated, concerted fashion. Numerous tables and graphs of statistical data are included. (HC-L)

- 4689 Schuftan, C.** *Nutritional planning—what relevance to hunger?* Food Policy (Guildford, UK), 3(1), Feb 1978, 59-65. Engl.

The author explores the effect of nutrition planning on the major food problems of the world. After briefly defining the magnitude and principal locations of food shortages and discussing the effects of population growth, he examines the failure of short-term planning that attacks individual symptoms rather than the underlying causes. Economic aspects stemming from the conflict between rich and poor countries are also considered. The role of international aid and teaching assistance in agricultural development is assessed and the need to adapt to local conditions is emphasized. After analyzing

the political nature of nutrition planning, suggestions are made to increase the effectiveness of planners. (FM)

V.4 Geographic Distribution of Health Services

- 4690 Daschbach, C.C., Connolly, R.J.** *Medicine in Mexico: X: human resources.* Arizona Medicine (Scottsdale, Ariz.), 35(7), Jul 1978, 475. Engl.

Medical personnel in Mexico range from Indian shamans and traditional birth attendants to prescribing pharmacists and Western-trained physicians, of whom there are currently over 55 000 licensed to practice. Beginning in 1979, this number is expected to increase by 25% each year. In 1970, almost half of Mexico's doctors were working in the capital and, in 1976, 43% were employed by socialized health institutions and 22% by the government, although many of these physicians had private practices as well. There is an acute shortage of nurses, mainly due to the Latin American attitude toward working women, and by 1980 the nurse:physician ratio is expected to be 1:3. (DP-E)

- 4691 Mera, J.A.** *Número y distribución de médicos en la Argentina; aspectos educacionales y de política sanitaria.* (Number and distribution of physicians in Argentina; educational and health policy aspects). Medicina (Buenos Aires), 38(3), 1978, 308-318. Span. 39 refs.

The fact that Argentina has an acceptable physician:population ratio (19.7:1 000) has failed to have an appreciable impact on health indicators; rather, the abundance of physicians has downgraded professional status, increased health expenditure, and hampered the development of a more effective health system. This article examines the factors responsible for the overproduction and maldistribution of physicians, pointing out changes in medical education and health policy that could improve the quality of medical care throughout the country. (HC-L)

- 4692 Parker, R.C., Sorensen, A.A.** *Tides of rural physicians: the ebb and flow, or why physicians move out of and into small communities.* Medical Care (Philadelphia, Pa.), 16(2), Feb 1978, 152-166. Engl. 68 refs.

To determine the characteristics of physicians who move into and out of rural areas, surveys were conducted of 67 physicians establishing practices in rural counties of New York State, USA, and 88 doctors leaving similar practices. It was found that good professional support is mandatory for attracting physicians to rural areas, as well as a predisposition to small community life. Reasons for leaving were grouped into economic, social, and professional categories, with an unsatisfactory professional situation being the most common cause of physician mobility. Suggestions are given for improving conditions in which rural physicians practice to improve the imbalance between physician:patient ratios in urban and rural areas. (Modified journal abstract.)

V.5 Financial Aspects

See also: 4524.

- 4693 Cheng, T.O.** *Free medical care in China.* Annals of Internal Medicine (Philadelphia, Pa.), 85(3), Sep 1976, 396-397. Engl.

The author contends that free medical care in China is not a myth. For people working in state-run production units, medical costs are borne by their place of work. Free medical care is also available to those working in such areas as government, science, athletics, and education, as well as to students and war veterans. For those who pay, the cost is very low. The cost of drugs is also minimal. (DP-E)

- 4694 Figueroa S., M.** *Costo de la salud en Honduras.* (Health expenditure in Honduras). Revista Centroamericana de Ciencias de la Salud (San José), 2(4), May-Jun 1976, 161-170. Span.

An examination of public health expenditure in Honduras during the 1970s reveals that urgent health priorities such as improved sanitation, child health services, and rural health care are consistently being neglected in favour of hospital service for the urban adult. Moreover, contradictions inherent in the Ten Year Plan (1970-1980) make it evident that this trend will continue. (HC-L)

- 4695 Lizana G., J.** *Chile, modelo de un país en desarrollo para la automatización del laboratorio clínico.* (Chile, a developing country model for automated clinical laboratories). Boletín de la Oficina Sanitaria Panamericana (Washington, D.C.), 84(3), Mar 1978, 240-246. Span.

Technologically developed countries have introduced automation into their laboratories to keep up with increasing workloads; this approach is also being tried in Chile. This article discusses the objectives of automation, the type of equipment available on the international market, and selection criteria. Although Chile has 15 automated units, their impact has not been as substantial as anticipated. The future of automation in Chile and Latin America in general should be examined in terms of prevailing economic conditions and the service infrastructure. The author feels that Chile is not ready for such expensive and sophisticated equipment and should rely more on appropriate technology. (Modified journal abstract.)

- 4696 Rodríguez, N.C.** *Nutritional index of some Philippine foods in relation to cost.* Philippine Journal of Nutrition (Manila), 29(4), Oct-Dec 1976, 148-159. Engl. 17 refs.

This Philippine study produced an index relating the cost of different foods to the quantity of nutrients each one supplies. After reviewing previous studies in this area, the author explains the various calculations involved in arriving at her present index. The nutrient content of the food, the percentage of the recommended nutrient it contains, and the price are used in calculating the nutritional-cost index. The indices for various foods are listed.

Finally, the limitations of the methods are discussed. Statistical data are included. (DP-E)

- 4697 Vega de Bandek, E.M.** *Costo de la salud en El Salvador. (Health expenditure in El Salvador).* Revista Centroamericana de Ciencias de la Salud (San José), 2(4), May-Jun 1976, 157-160. Span. Statistics from this 1972 report show that El Salvador's Instituto del Seguro Social, which covers 4.5% of the population, spent 35% of the health budget, while the Ministry of Public Health, which is theoretically responsible for 92% of the population, spent only 60% of it. In addition, 59% of the Ministry's portion went toward hospital expenditure. These facts indicate serious inequities in the allotment of available funds and an inappropriate emphasis on curative medicine. (HC-L)

V.6 Cultural Aspects

See also: 4352.

- 4698 Chu, G.S., Palmieri, J.R., Sullivan, J.T.** *Beetle-eating: a Malaysian folk medical practice and its public health implications.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(4), Dec 1977, 422-427. Engl. 11 refs.

A reported practice of live beetle ingestion in Southeast Asia was investigated among urban Chinese in Kuala Lumpur, Malaysia. Results of four case-findings indicate that the practice may not be confined to West Malaysia, it occurs among both Chinese and Malays, the original use of the beetle as an aphrodisiac has been modified to include treatment of a wide variety of ailments and diseases, and the practice is relatively uncommon among urban Chinese. It was also found through experimental studies that ingestion of live beetles (*Palembus dermestoides*) represented a potential public health hazard in that the beetles were able to serve as a host for the human-infecting tapeworm *Hymenolepis diminuta*. (Modified journal abstract.)

- 4699 El-Islam, M.F.** *Transcultural aspects of psychiatric patients in Qatar.* Comparative Medicine East and West (New York), 6(1), 1978, 33-36. Engl. 10 refs.

The illness behaviour of Qatari psychiatric patients is defined by the nature of their symptomatology. The importance of somatic symptoms in determining the patient role and patient-doctor relationship is discussed in the light of cultural characteristics of the Qatari community. Delusory cultural beliefs related to possession, sorcery, and envy provide a conceptual framework for the explanation of many disorders. Inter-generational conflict is an important factor in neurotic disorders. Failure to report symptoms in an abstract fashion is typical of Qatari patients. Their cultural and religious heritage absorbs many behaviours that would otherwise be considered symptomatic of psychiatric disorder. (Modified journal abstract.)

- 4700 Hamburger, S.** *Profile of curanderos: a study of Mexican folk practitioners.* International Journal of Social Psychiatry (London), 24(1), Spring 1978, 19-25. Engl.

In an attempt to locate and study indigenous Mexican folk healers (*curanderos*), the author interviewed six Mexican-American outpatients at a university hospital in a small US border town. While two of the patients admitted that they consulted *curanderos*, none would reveal any names or addresses. In a 2nd attempt, the author established contact with members of a women's club, who introduced her to 14 *curanderos*. The data she collected via a 26-item questionnaire are used to establish a profile of the average *curandero*, who is especially successful at treating mental illnesses. Statistical data are included. (DP-E)

- 4701 Howard, G.R.** *Socio-economic factors affecting utilization of a rural Indian hospital.* Tropical Doctor (London), 8(4), Oct 1978, 210-219. Engl.

A study was undertaken to determine the socioeconomic factors affecting utilization of a small (135-bed) rural hospital in central India. First-hand observation in the village and the hospital, plus a review of hospital records over a 6-year period, revealed that hospital utilization was limited by seasonal variation related to climate and means of livelihood, religious and local holidays, a sex-bias in favour of males, hospital fees-for-service, and the availability and greater acceptability of practitioners of indigenous medical systems. This paper discusses these findings and concludes that the complex nature of area health requirements makes it impossible for the hospital to influence significantly community health standards. (HC-L)

- 4702 Ing, D.K.** *Folk medical beliefs and practices in Sitiawan.* Medical Journal of Malaysia (Singapore), 31(4), Jun 1977, 338-346. Engl. Refs.

To help Western-trained physicians treating Malaysian patients, the author presents a study of the beliefs and practices of the people of Sitiawan with regard to illnesses, their causes, and their cures. Disease is attributed to heat, cold, wind, water, poison, or the supernatural and treated accordingly by acupuncture, moxibustion, bloodletting, massage, etc. The author points out that some of these treatments are beneficial and could be adapted to modern medicine, although he mentions others that are dangerous and can be fatal. (RMB)

- 4703 Keita, S.** *Farine de pain de singe plus efficace que la sulfaganidine. (Monkey bread flour more effective than sulfaguandine).* Afrique Médicale (Dakar), 146(12), 1977, 17-19. Fren.

The use of monkey bread (baobab) flour to treat diarrhea in adults and children in Mali is recommended. Used in traditional medicine, it is now being accepted in health centres where tests have shown it is more effective than conventional anti-diarrhetics such as sulfaguandine. The formula, which involved mixing baobab flour with calcium carbonate, flavouring, alcohol, lemon juice, and sugar, is distributed in 20 g sachets. A simpler formula for clinics with few resources is also included.

For an adult, 1-3 sachets are sufficient, while 1 sachet is the recommended dosage for children. Experience has shown that the length of treatment for diarrhea is greatly reduced by this practice. (FM)

- 4704 Malina, R.M., Himes, J.H.** *Seasonality of births in a rural Zapotec municipio, 1945-1970.* Human Biology (Detroit, Mich.), 49(2), May 1977, 125-137. Engl. Refs.

From 1945-1970, the monthly distribution of live births was analyzed in a rural Zapotec-speaking community in Oaxaca, Mexico. It was noted that monthly distribution of births deviated from that which would be expected by chance. High monthly percentages of births coincided closely with the rainy season in the Oaxaca Valley, so that the number of births during the rainy season exceeded the expected, while the number of births during the dry season were less than expected. Ethnographic observations for Zapotec communities suggest that the seasonal distribution of births may reflect the cultural pattern associated with the annual agricultural cycle. (Modified journal abstract.)

- 4705 Micklin, M., Leon, C.A.** *Colombian views on causes and treatments for mental disorder: a comparative analysis of health workers and the public.* Social Psychiatry (Berlin-Wilmersdorf), 12(3), 1977, 133-148. Engl. Refs.

Perception of illness constitutes an important, though relatively neglected, topic for sociomedical research. In this study, beliefs about causes and treatments for mental illnesses are examined. Data are drawn from parallel surveys of health workers and community residents in Cali, Colombia. Results indicate that both groups emphasize physical causes and treatments and underestimate social and psychological factors. Nevertheless, sizeable variations are evident between as well as within the two samples. It is also demonstrated that views on causes and treatments often disagree and implications for programmes of psychiatric care are discussed. (Modified journal abstract.)

- 4706 Odebiyi, A.I.** *Socio-cultural factors affecting health care delivery in Nigeria.* Journal of Tropical Medicine and Hygiene (London), 80(11), Nov 1977, 249-254. Engl. Refs.

The Nigerian concept of disease (generally believed to be caused by supernatural or enemy interference) leads naturally to a preference for traditional rather than Western medicine. The author discusses certain customs, taboos, and habits that not only create health problems but also frustrate the efforts of modern medicine, including forced hand feeding and tongue feeding of Yoruba infants, female circumcision, the care of motherless infants, fattening brides-to-be, and the application of a herbalist mixture containing dung to the cut cord of newborns. Suggestions for overcoming some of these problems are given. (RMB)

- 4707 Rawlinson, R.** *Health and nutrition concepts in uneducated highland women.* Papua New Guinea

Medical Journal (Port Moresby), 20(3), Sep 1977, 117-124. Engl.

In 1975, child health record booklets were distributed to uneducated highland women in Papua New Guinea. A follow-up study assessed the usefulness of the booklets as a clinical record and also as a motivator of maternal feeding behaviour. Although the women recognized the importance of the booklets and so provided the clinic staff with a continuous record of treatment and development, they failed to understand the concepts of health, nutrition, body weight, and growth put forward in the books. Acculturation, incomplete instruction, and the complicated nature of some of the concepts are seen to be the major obstacles to understanding. An appendix contains the Pidgin questionnaire used to assess the mothers' use and understanding of the booklets. (FM)

- 4708 Sharma, D.B., Lahori, U.C.** *Some aspects of infant rearing practices and beliefs in the urban and rural areas of Jammu (Kashmir).* Indian Pediatrics (Calcutta, India), 14(7), Jul 1977, 511-518. Engl. 11 refs.

A survey of the infant rearing practices and beliefs of 250 urban and 300 rural mothers was conducted in Kashmir, India, from December 1974-December 1975. Home deliveries, breast-feeding, supplementary feeding, hygiene, child health, and child care are among the many aspects of the topic examined. Reasons for incorrect information and behaviour are considered and suggestions for health education activities are offered. Statistical data are included. (DP-E)

- 4709 Stacy, S.** *Who should learn what? Health education amongst traditionally oriented Australian Aborigines.* Food and Nutrition Notes and Reviews (Canberra, Australia), 34(3), 1977, 120-125. Engl.

Health education programmes among the Aborigines of Australia have been almost totally ineffective, because the Aborigines and their would-be teachers see the world in very different ways. The Aborigines attended the programmes for the sake of developing relationships, something they see as an end in itself. The high infant mortality among the group, which the health educators were trying to ameliorate, was accepted as normal, just as developed countries accept large numbers of deaths in traffic accidents. Consequently, understanding their way of perceiving the world is a prerequisite to teaching Aborigines. (DP-E)

- 4710 Taylor, J.C.** *Pre-contact Aboriginal medical system on Cape York Peninsula.* Journal of Human Evolution (London), 6, 1977, 419-432. Engl. 16 refs.

This paper examines the medical system of two Aboriginal tribes in western Australia; both had been protected from any contact with European society until 1938. Following a general description of the physical, social, and cultural characteristics of the population, their attitudes to disease and use of traditional medicines are outlined. The role of the traditional practitioner is also covered. In comparison with other medical systems, the

native system was found to be inefficient in therapeutic techniques and preventive measures. Despite its usefulness in promoting social solidarity, it did little to protect the population from the environment and mortality was high. (FM)

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

See also: 4379, 4477, 4490, 4494, 4525, 4547, 4696, 4703.

- 4711 Abdel-Salam, E., Abdel-Fattah, M.** *Prevalence and morbidity of Schistosoma haematobium in Egyptian children.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(3), May 1977, 463-469. Engl. 18 refs.

The prevalence and severity of *Schistosoma haematobium* were studied in three villages in Giza, Egypt. Seven hundred and eighty-six children, aged 6 months-10 years, showed a prevalence of the disease that correlated with the socioeconomic level of their villages. The intensity of infection, however, was unrelated to prevalence, although infected children also showed a higher prevalence of other helminthic infections. The study focused on the often-ignored younger children, in whom infection can easily be cured or avoided. The results indicate that the infection's severity should receive more attention when choosing treatment. Statistical data are included. (DP-E)

- 4712 Acheson, R., Cañosa, C.A., Blanco, R.** *Nutrición y desarrollo óseo. (Nutrition and bone development).* Revista Española de Pediatría (Zaragoza, Spain), 33(198), Nov-Dec 1977, 583-590. Span. 20 refs.

Research into the effects of prenatal and childhood malnutrition on bone development reveal that underfed children of both sexes are generally smaller and weigh less than adequately fed children of the same age, protein-calorie malnutrition tends to affect girls less than boys with respect to bone maturation, and decrease in bone density is usually caused by serious protein-calorie malnutrition rather than vitamin deficiencies. These conclusions were drawn from comparative studies of Guatemalan and North American children; some of the results are presented and discussed in this paper. Statistical data are included. (HC-L)

- 4713 Adams, W.H., Gurung, S.** *Anaemia of pregnancy in Kathmandu, Nepal; a clinical appraisal of statistical predictions of anaemia in a population.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(4), Dec 1977, 359-364. Engl. 13 refs.

A detailed clinical study of 151 women in the 3rd trimester of pregnancy in Kathmandu, Nepal (altitude 1 340 m), indicated that a previously reported statistical approach via mass screening of a population without regard to potential haematologic abnormalities appears valid in establishing the low limit of normal haemoglobin (Hb) levels in pregnancy, the approximate percentage of the

population that is anaemic, and the distribution of anaemic values. The existing WHO criterion regarding low normal Hb levels in pregnancy was misleading when used to diagnose the most common cause of anaemia. It was found that a pregnant woman with a Hb of 9.0 g% could conceivably not be anaemic at this altitude. Statistical data are included. (Modified journal abstract.)

- 4714 Ademuwagun, Z.A.** *Determinants of pattern and degree of utilization of health services in Western State, Nigeria.* Israel Journal of Medical Sciences (Jerusalem), 13(9), Sep 1977, 896-907. Engl. 15 refs.

A survey of the determinants of the pattern and degree of utilization of health services in two divisions of Western State, Nigeria, indicated that there was a close similarity between the two divisions in the choice and use of services even though one is urban and the other is rural. The study showed that the choice of a particular service was based on a complex of factors, such as age, occupation, attitude, and geographical location. The implications of the determining factors for health planning and public health education are outlined. Statistical data are included. (Modified journal abstract.)

- 4715 Alderman, M.H., Wise, P.H., Ferguson, R.P., Laverde, H.T., D'Souza, A.J.** *Reduction of young child malnutrition and mortality in rural Jamaica.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 24(1), Feb 1978, 7-11. Engl. 24 refs.

In Jamaica, malnutrition is at least a contributing cause of 60%-80% of all deaths among children aged 1-4 years. In 1970, a pilot project, the Young Child Nutrition Programme (YCNP), was developed in a small rural district to improve nutrition through comprehensive anthropometric surveillance identification of malnourished children and a health education programme. Both malnutrition and child mortality were reduced 50%. In 1973, the YCNP was expanded to serve the entire parish of Hanover. During the next 3 years, the prevalence of malnutrition among the 6 651 children in the area aged less than 4 years fell by 40% and child mortality declined 60%. Statistical data are included. (DP-E)

- 4716 Alemany Martorell, J., Hernández Leal, R.** Cuba, Ministerio de Salud Pública. *Encuesta nacional de oftalmología en círculos infantiles y jardines de la infancia/Ophthalmologic (sic) survey for the early detection of eye diseases that avoid the visual development of pre-school children.* Havana, Ministerio de Salud Pública, Centro Nacional de Información de Ciencias Médicas, n.d. 35p. Engl., Span.
Twenty-second International Ophthalmology Congress, Paris, France, 22-28 May 1973 and National Ophthalmology Symposium, Camaguey, Cuba, 25-27 Nov 1974.

In a 6-month period in 1972 and 1973, more than 40 000 Cuban children aged less than 6 years underwent ophthalmologic examinations by medical teams in each province. The survey methodology is described. The re-

sults of this attempt at early detection of visual problems are reported in detail. It was concluded that the most frequent eye problem encountered is strabismus and that the survey should be extended to other sectors of the population. (DP-E)

- 4717 Antener, I., Verwilghen, A.M., Van Geert, C., Mauron, J. Dietary treatment of malnutrition: balance-sheets of the main nutrients; part II.** *International Journal for Vitamin and Nutrition Research* (Bern, Switzerland), 47(2), 1977, 167-199. Engl. 102 refs.

Also published in French and German.

The results of a balance study of nitrogen, fat, electrolytes, and trace elements in the diets of malnourished children aged 42 months-9 years in the Kwilu region of Zaire are presented. The composition of the diets, the methods employed in the study, and the generally successful results of a remedial nutrition programme are reported in some detail. A description of the biochemical checks used to evaluate the treatment and progress of the children will appear in part 3 of the study. The authors stress the need for curing intestinal ailments before nutrition programmes can be effective. Statistical data are included. (DP-E)

- 4718 Antener, I., Verwilghen, A.M., van Geert, C., Mauron, J. Biochemical study of malnutrition-situation before treatment.** *Acta Tropica* (Basel, Switzerland), 34(4), 1977, 331-354. Engl. 76 refs.

This study carried out in a small laboratory in a rural hospital in Zaire involved 26 measurements on blood, 2 sets of isoenzyme separations, 29 measurements on urine, 19 on fecal ultrafiltrates, and qualitative tests for starch, fat, albumin, and sugars in total feces. The malnourished subjects were mainly children and young women. Biochemical evidence revealed that serious hepatic disorders and impairment of intestinal function were much more common among the malnourished patients examined than in a normal control group. Statistical data are included. (Modified journal abstract.)

- 4719 Arfaa, F., Ghadirian, E. Epidemiology and mass-treatment of ascariasis in six rural communities in central Iran.** *American Journal of Tropical Medicine and Hygiene* (Baltimore, Md.), 26(5), Sep 1977, 866-871. Engl. 13 refs.

In 1972, villagers of six villages near Isfahan, Iran, were examined for intestinal parasites, treated with an anthelmintic, and reexamined at regular intervals to determine the rate of reinfection. The average prevalence of ascariasis was 91%, with little age or sex differentiation. Although chemotherapy reduced the rate of infection, it was near its original level within 1 year, indicating the need to repeat treatment every 2-3 months. Because the high prevalence of ascariasis is due to the practice of using human night-soil as the principal fertilizer for most crops, improvements in sanitation and hygiene are also essential. (FM)

- 4720 Arfaa, F., Kayvan, E., Ghadirian, E., Missaghian, G.H. Studies on intestinal helminthiasis in Gonbad Kavus area, north-east of the Caspian Littoral.** *Iranian Journal of Public Health* (Tehran), 6(1), Spring 1977, 24-29. Engl. 14 refs.

A survey of 42 villages in Gonbad Kavus revealed a surprisingly low prevalence of parasitic infection, with the exception of *Hymenolepis nana*, compared to other areas of Iran. An examination of the stool samples of 1 240 randomly-selected villages showed low infection rates of *Ascaris* (0.2%), *Trichostrongylus* (1.2%), hookworm (2.4%), and *Trichuris* (0.2%). The authors attribute these results to the fact that nightsoil is not used as a fertilizer, as it is in other parts of the country, and to a low consumption of vegetables. The reverse correlation between parasitic infection and cancer is noted and discussed. (RMB)

- 4721 Bai, K.I., Sastry, V.N., Subbaiah, D.V., Rao, G.K. Assessment of nutritional status of pre-school children: a comparison of methods.** *Journal of Tropical Pediatrics and Environmental Child Health* (Kampala), 23(5), Oct 1977, 224-225. Engl.

An anthropometric study comparing methods of nutrition evaluation was carried out on 750 children aged 12-60 months who attended the pediatric outpatient clinic at S.V.R.R. Hospital, Tirupati, India. It was observed that measuring both the midarm:head circumference ratio and weight for age gives good indices for detecting borderline to frank malnutrition cases. Measuring chest:head ratio does not detect all cases of malnutrition; in this study, 36% of the cases were missed when this method alone was used. Such comparative tests help in choosing one simple, yet reliable and accurate, method of measuring malnutrition in children. (FM)

- 4722 Bakshi, A.C., Bhandari, N.R. Assessment of nutritional status of pre-school children in Bhopal.** *Indian Pediatrics* (Calcutta, India), 14(8), Aug 1977, 615-623. Engl. 12 refs.

A nutritional study of 1 000 children aged 1-5 years in Bhopal, India, revealed that, among boys aged 2 years, the 50th percentile was below the 3rd percentile of Harvard standard and equal to the 10th percentile of ICMR standard, while in girls the 2nd measurement was slightly below the 25th percentile. At age 5 years, the percentile in both sexes was equal to the ICMR 50th percentile. Weaning was delayed in 62.8% of the children; 4.8% were breast-fed even after 3 years of age and only 6.4% received semisolids at age 6 months. Only 16.4% of the children ate more than 90% of their daily energy requirement. Statistical data are included. (Modified journal abstract.)

- 4723 Balakrishnan, S., Hussein, H.B. Breast feeding in Kelantan.** *Journal of Tropical Pediatrics and Environmental Child Health* (Kampala), 23(2), Feb 1977, 80-82. Engl.

A total of 461 mothers attending maternal child health clinics in North Kelantan, Malaysia, were interviewed to

assess the incidence of breast-feeding and their awareness of its advantages. Although 95% of the mothers were breast-feeding, only 18% continued fully up to 3 months and only 9% up to 6 months. It was found that 78% introduced solid foods before the 3rd month and many as early as the 1st. It is suggested that breast-feeding programmes should discourage early use of supplements and solid foods and concentrate instead on the value of breast milk as a source of nutrition as well as immunologic protection against disease. (FM)

- 4724 Basu, R.N., Khodakevich, L.N.** *Surveillance at weekly markets in the smallpox eradication programme in India.* Indian Journal of Public Health (Calcutta, India), 22(1), Jan-Mar 1978, 44-49. Engl. 10 refs.

As part of India's smallpox eradication campaign, a technique for questioning villagers at rural markets concerning local smallpox cases was developed. Two team members are stationed at each market entrance, one to catch the attention of the arriving crowds and elicit information, the other to record it; reported cases are later verified by questioning other villagers and ultimately by the appropriate medical officer. Three studies of this method indicated that it is slightly less effective than house-to-house surveillance; efforts to expand the technique to cover measles and chickenpox have not proved successful. Statistical data are included. (DP-E)

- 4725 Belcher, D.W., Neumann, A.K., Ofosu-Amaah, S., Nicholas, D.D., Blumenfeld, S.N.** *Attitudes towards family size and family planning in rural Ghana; Danfa Project: 1972 survey findings.* Journal of Biosocial Science (London), 10(1), Jan 1978, 59-79. Engl. 16 refs.

A family planning survey, conducted in 2000 households in rural Ghana from April-October 1972, is described. Knowledge about family planning was 3 times that reported in earlier studies. About 70% of the respondents approved in principle, but most, especially males, still wanted large families. Women are most receptive to family planning, although motivation of males is being stressed because of their dominant position in most households. Most villagers hear about birth control methods through informal, word-of-mouth channels with little use of news media, family planning workers, or clinic personnel. Village-based educators are now working with community volunteers to improve family planning practices. (Modified journal abstract.)

- 4726 Bennike, T., Frandsen, F., Mandahl-Barth, G.** *Bilharziose à Kinshasa: données actuelles et danger pour l'avenir; études malacologiques, biologiques, cliniques et épidémiologiques. (Schistosomiasis in Kinshasa: the present situation and dangers for the future; malacological, biological, clinical, and epidemiological studies).* Annales de la Société Belge de Médecine Tropicale (Brussels), 56(6), 1976, 419-437. Fren. 20 refs.

Statistical data from various studies show that *Schistosoma mansoni* is being transmitted in Kinshasa (Zaire) and that local snails also have the ability to transmit *S.*

intercalatum. Snail surveys showed that *Biomphalaria camerunensis*, *Bulinus globosus*, and *Bu. forskali* were all present in Kinshasa, although there was no evidence of naturally infected snails. Some patients with *S. mansoni* infections were found from whom clear histories excluded infection outside of Kinshasa. Statistical data are included. (Modified journal abstract.)

- 4727 Berlin, E.A., Markell, E.K.** *Assessment of the nutritional and health status of an Aguaruna Jivaro community, Amazonas, Peru.* Ecology of Food and Nutrition (London), 6(2), 1977, 69-81. Engl. Refs.

A 1976 study of the nutritional adequacy of the traditional diet of the Aguaruna Jivaro Indians of Peru demonstrates its sufficiency and balance of nutrients. Anthropometric measurements and clinical examination for detection of signs of nutritional deficiencies have also verified the relative good health of the population. Follow-up blood tests confirm the positive health picture. A high relevance of certain parasites was found, but these parasites were well tolerated, probably due to the quality and quantity of the Aguaruna diet. Statistical data are included. (Modified journal abstract.)

- 4728 Bildhaiya, G.S., Bose, C.** *Comparative study of the health status of infants and preschool children in rural and urban areas of Jabalpur, Madhya Pradesh.* Indian Journal of Pediatrics (Calcutta, India), 44(356), Sep 1977, 257-271. Engl. Refs.

An 18-month comparative study of the health status of 391 infants and preschool children was carried out in Jabalpur and the villages in the catchment area of the Field Health Centre, Natwara, India. Information was collected on demographic and socioeconomic conditions of the children's families, birth history, feeding patterns, anthropometric measurements, morbidity, personal hygiene, etc. The data were analyzed and a comparison made between the rural and urban areas. In general, the urban children showed higher standards of nutrition and personal hygiene, although fewer of them had primary vaccination scars. Statistical data are included. (DP-E)

- 4729 Binns, C.W.** *Arm circumference measurement in children of Papua New Guinea.* Papua New Guinea Medical Journal (Port Moresby), 20(3), Sep 1977, 131-134. Engl. 10 refs.

During nutritional studies in various parts of Papua New Guinea from 1972-1976, anthropometric measurements of mid-upper arm circumference and triceps fatfold were taken of children aged 1-5 years. The usefulness of these measures as a nutritional index and as indicators of the relative importance of protein and energy deficiencies is assessed. Results show that Port Moresby children were deficient in protein and Enga children in energy. The high incidence of bias and error connected with mid-arm circumference, however, suggests that caution should be used in interpreting the data. Nevertheless, its convenience and sensitivity make it a useful tool. (FM)

- 4730 Black, F.L., Hierholzer, W.J., Black, D.P., Lamm, S.H., Lucas, L.** *Nutritional status of Brazilian Kayapo Indians.* Human Biology (Detroit, Mich.), 49(2), May 1977, 139-153. Engl. 20 refs.

The nutritional status of two Kayapo populations in Brazil was studied at a time when they were little affected by other cultures. Contrary to inferences of earlier studies on food intake, it was found that their nutritional status was generally good. Infants were small, but as age increased the Indians gained relative to standard growth curves. Weight:height ratios and midarm muscle circumference compared favourably to North American norms. Hair root diameters, a measurement that indicates degree of protein-calorie malnutrition, were a little below available norms, but the proportion of roots in the growing phase was normal. (Modified journal abstract.)

- 4731 Blacker, J.G.** *Estimation of adult mortality in Africa from data on orphanhood.* Population Studies (London), 31(1), 1977, 107-128. Engl. 28 refs.

A method for estimating adult mortality in Africa by analyzing statistical data on orphanhood is evaluated. After showing, with examples from Chad and Kenya, that this method can be reliable and internally consistent, the authors outline five potential sources of bias. Research on these problems and on means of minimizing their effects is now in progress in the 2nd stage of the evaluation of this technique. Generally, it is felt to be a quick, simple, and inexpensive way to obtain a rough index of adult mortality. (FM)

- 4732 Blankhart, D.M., Latham, M.C., Schulpen, T.W.** *Low arm circumference reporting and nutrition rehabilitation of under fives.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(1), Feb 1977, 8-11. Engl.

The nutrition component of the Machakos Project (Kenya) is described. During home visits every 2 weeks from September 1974-May 1975, 12 local health workers measured the upper arm circumference of approximately 4 000 children aged less than 5 years. Of these children, 91 were reported as malnourished; 54 of their families received nutrition education and, if necessary, food supplements. All but 18% of the children showed good or satisfactory growth after 2-9 months. The authors discuss the desirability of implementing nutrition programmes in the home. Statistical data are included. (DP-E)

- 4733 Bowry, T.S., Cameron, H.M.** *Liver disease in early life in Kenya.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 70(5-6), 1976, 439-443. Engl. Refs.

In a survey of liver disease during the 1st 20 years of life, biopsy and autopsy specimens were examined over a 5-year period in the University of Nairobi Department of Pathology (Kenya). The main patterns of liver disease that were revealed during the study are described and their distribution noted according to sex and age. Some types of disease, such as giant cell hepatitis, showed no differences from cases found in other countries. Others,

including fatty change in the liver caused by kwashiorkor, abscess, and schistosomiasis, are common in Kenya because of known environmental conditions. A final group including hepatic necrosis, liver cancer, portal vein thrombosis, etc., showed particular features or a rate of frequency peculiar to Kenya. (FM)

- 4734 Brown, J.D.** *Study of the measles immunization status of children admitted to the paediatric observation ward of the Kenyatta National Hospital, Nairobi during November and December 1976.* East African Medical Journal (Nairobi), 54(10), Oct 1977, 531-534. Engl.

In June, 1976, a severe measles epidemic started in Nairobi, Kenya, and continued for a number of months. It was thought that most of the affected children had been vaccinated, but a study revealed that most were not. The author suggests that a greater effort should be made to immunize children against measles, a preventable disease that nonetheless is one of the 10 major causes of death in Kenya. Statistical data are included. (Modified journal abstract.)

- 4735 Brown, J.E., Brown, R.C.** *Finding the causes of protein-calorie malnutrition in a community; part III: the causes of malnutrition at Bulape, Zaire.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(19), Oct 1977, 254-261. Engl.

See also entries 4393 and 4394.

Practical applications of the checklist for causes of protein-calorie malnutrition and the sampling techniques described previously in this series were carried out in Bulape, Zaire, from 1973-1976. The surveys showed that food supplies were adequate in all households and that nutrition-related problems were in the area of food use and feeding practices. Major problems were then ranked according to their frequency, seriousness, and possibility of improvement. Of highest priority was the need for a policy of family planning emphasizing child spacing to combat the problem of early weaning. Also important was the need to improve the diet of small children by increasing the protein content and teaching mothers better ways of food preparation. (FM)

- 4736 Brozek, J., Coursin, D.B., Read, M.S.** *Longitudinal studies on the effects of malnutrition, nutritional supplementation, and behavioral stimulation.* Bulletin of the Pan American Health Organization (Washington, D.C.), 11(3), 1977, 237-249. Engl.

At a 1975 meeting in Cali, Colombia, participants compared the methods and results of six nutritional studies. Tentative results indicated that there was some evidence that birth-weights were increased by nutritional supplements under certain ecological and socioeconomic conditions. Supplements to malnourished children increased their rate of growth, but it was concluded that there was probably no real catch-up growth that could bring them to normal. Supplements to pregnant or lactating women or malnourished children may, however, affect behaviour. Earlier supplements gave better results and

effects seemed more definite on motor rather than cognitive factors. (Modified journal abstract.)

- 4737 Bunnag, T., Rabello de Freitas, J., Scott, H.G.** *Sewage stabilization pond: the effects on Schistosoma mansoni transmission.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(1), Mar 1978, 41-47. Engl. 17 refs.

Sewage stabilization (oxidation) ponds appear to be an economical, practical method for the treatment of wastes in tropical regions. This Brazilian study examines the effect of such ponds on the hatchability and infectivity of *Schistosoma mansoni* eggs and *miracidia* and survival of *Biomphalaria glabrata*. It was found that properly-designed ponds could be effective in controlling these parasites and providing a barrier to schistosomiasis transmission. Extensive statistical data are included. (DP-E)

- 4738 Carney, W.P., Van Peenen, P.F., See, R., Hagelstein, E., Lima, B.** *Parasites of man in remote areas of central and south Sulawesi, Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 8(3), Sep 1977, 380-389. Engl. 15 refs.

See also entries 4745 and 4843.

A bio-medical survey was conducted in 10 villages in central and south Sulawesi, Indonesia, to learn whether oriental schistosomiasis was endemic and to determine the prevalence of other intestinal parasites, malaria, and filariasis. Although persons with schistosomiasis were found in three southern villages, follow-up inquiries revealed that they had recently migrated from a known schistosomiasis area in central Sulawesi. Other intestinal parasites diagnosed were *Ascaris lumbricoides*, *Trichuris trichiura*, hookworm, *Entamoeba histolytica*, and *Giardia lamblia*. Malaria was found in 4% of the sampled populations and filariasis in 21%. Statistical data are included. (Modified journal abstract.)

- 4739 Chandra, R.K., Newberne, P.M.** *Nutrition, immunity, and infection; mechanisms of interactions.* New York, Plenum Press, 1977. 248p. Engl. This book provides a concise, critical summary of the most recent research findings on the relationships between diet and morbidity and mortality and assesses the significance and limitations of the data gathered so far. The effects of nutritional status and infection, both separately and in combination, on immunity function in man and animals are examined. The authors point out the difficulties in interpreting data from controlled experiments in the hope that this will indicate areas for future research. Statistical data are included. (RMB)

- 4740 Chumbley, L.C.** *Impressions of eye diseases among Rhodesian blacks in Mashonaland.* South African Medical Journal (Capetown), 52(8), 13 Aug 1977, 316-318. Engl. 27 refs.

A survey of black ophthalmic patients at Harari Hospital (Mashonaland, Rhodesia) revealed incidences of 8.5% of myopia in adults and of 0.8% of squint in children aged less than 15 years. Non-traumatic, idiopathic pri-

mary retina detachments, congestive angle closure glaucoma, and diabetic retinopathy are rare, although retinal detachments, chronic angle closure glaucoma, and hypertensive retinopathy are occasionally seen. Visual loss and blindness from corneal diseases are widespread. There is a surprisingly low incidence of senile macular degeneration. (Modified journal abstract.)

- 4741 Closa, S.J., Meredith, C., Rio, M.E.** *Protein and energy requirements in infants recovering from malnutrition.* Nutrition Reports International (Los Altos, Cal.), 16(5), Nov 1977, 557-563. Engl. 9 refs.

A feeding programme was set up for the nutritional rehabilitation of 50 non-infected Argentinian infant outpatients. The infants were given sweetened cow's milk either alone or with baby foods. After 10 days of therapy, nutritional results were evaluated in 14 infants over a period of 24 hours relating exact energy and protein intake to the excretion of urea and hydroxyproline. For intakes below 110 Kcal/kg.d, protein utilization was poor for both diets. When energy intake surpassed this minimal requirement, utilization increased but was significantly greater for diets supplying about 15% protein calories than for those with only 12%. Statistical data are included. (Modified journal abstract.)

- 4742 College of General Practitioners, Penang Chapter, Penang, Malaysia.** *Laboratory needs in general practice.* Medical Journal of Malaysia (Singapore), 32(1), Sep 1977, 56-58. Engl.

A survey was conducted in Penang, Malaysia, to determine whether or not existing laboratory facilities were sufficient for the needs of general practitioners. Thirteen physicians each collected data on 500 consecutive patients and noted that 10% required laboratory tests. Of these, 45.2% were investigated in the doctor's clinic, 11% in government or private laboratories, and 9.5% in hospitals; 34.3% did not have the test done, mainly for financial reasons. While it is concluded that physicians are generally able to provide adequate laboratory services using their own facilities, a cheaper laboratory system would aid both doctors and poorer patients. Statistical data are included. (RMB)

- 4743 Cookson, J.B., Cruickshank, J.G., Ellis, B.P.** *Experience with a tuberculosis antigen test in Rhodesia.* Thorax (London), 32(5), 1977, 616-618. Engl.

Experience in a predominantly black population of Rhodesia with a new serological method for the diagnosis of tuberculosis is reported. It was found that in only 69% of 167 patients was there agreement between serology and the presence or absence of tuberculosis. Both false positive and false negative results were common. Of 47 healthy controls, 80% were positive. These results are less satisfactory than previous studies but differences in the reading of the results seems an unlikely explanation. Differences in the populations studied may be an important factor. Statistical data are included. (Modified journal abstract.)

- 4744 Cremer, H.D., Flórez, A., de Navarro, L., Vuori, L., Wagner, M.** *Influence of food supplementation and/or psychological stimulation on mental development.* *Nutrition and Metabolism* (Basel, Switzerland), 21(6), 1977, 358-371. Engl.

A Bogota (Colombia) study analyzes the results of a nutrition programme that provided a supplement during pregnancy and the 1st 6 months-3 years of life with and without concurrent "psychological stimulation" given for 2 hours each week by a health visitor. Results revealed that, compared to the control group, women who received the supplement had a lower incidence of stillbirths and neonatal and perinatal deaths and their infants weighed more at birth. Growth slowed down in infants who were taken off the supplement and increased among those who received it. Psychological stimulation had a greater effect than supplements in increasing the rate of the infants' psychological development. Statistical data are included.

- 4745 Cross, J.H., Wheeling, C.H., Stafford, E.E., Irving, G.S., Petersen, H.V.** *Biomedical survey on the Minahasa peninsula of north Sulawesi, Indonesia.* *Southeast Asian Journal of Tropical Medicine and Public Health* (Bangkok), 8(3), Sep 1977, 390-399. Engl. 22 refs.

See also entries 4738 and 4843.

In May 1975, a bio-medical survey was undertaken in northern Sulawesi, Indonesia, to study the prevalence of schistosomiasis and other parasitic and infectious diseases. Results showed that schistosomiasis is not endemic to the area. A total of 2 495 blood smears revealed only two cases of malaria and no trace of microfilariae. Stool specimens from 828 individuals of both sexes aged 2 months-80 years showed a prevalence rate of 86% for one or more intestinal parasites. Most common were the soil-transmitted nematodes such as hookworm. Antibody titres were significant for such viruses as encephalitis, Hong Kong influenza, and *Pseudomonas pseudomallei*. (FM)

- 4746 Cusminsky, M., Castro, E., Camps, M.R., Saravia Toledo, R., Negrín, C.** *Experiencia nacional: estudios coordinados de crecimiento y desarrollo del niño. (National experiment: coordinated studies of child growth and development).* *Archivos Argentinos de Pediatría* (Buenos Aires), 74(1), 1976, 17-23. Span. 8 refs.

At a suburban centre in La Plata, Argentina, and at urban centres in Salta and Trelew, 46%-100% of local children were weighed and measured at birth and at age 1, 3, 6, 9, and 12 months. Socioeconomic standards and living conditions were best in La Plata and children there showed significantly greater bodyweight and height at all ages than those of the other cities. At age 1 year, infants in La Plata were from 0.3-1.0 kg heavier and 2.2-3.5 cm taller. Disregarding any ethnic differences between the cities, environment was thought to have a decisive effect on these results. (Modified journal abstract.)

- 4747 Daniel, S.O.** *Epidemiology of physical conditions of destitutes (beggars) in Lagos.* *Journal of Tropical Medicine and Hygiene* (London), 81(5), May 1978, 80-83. Engl.

At a camp in Gbagaba, Lagos, Nigeria, 183 destitutes were interviewed using a questionnaire to obtain baseline data concerning their physical handicaps and use of hospital facilities that could be utilized to plan rehabilitation services. About 66% of the destitutes (121) were disabled. The most common physical handicap was blindness, probably due to smallpox or measles. Poliomyelitis was the 2nd commonest cause of deformity. Ten of the group who had lost most of their fingers to leprosy were considered untrainable for employment, although the author felt that both the blind and the polio-disabled would benefit from vocational training. The need for free medical service is stressed. (RMB)

- 4748 de Mello Jorge, M.H.** *Fewer deaths in the district of Sao Paulo, Brazil.* *Bulletin of the Pan American Health Organization* (Washington, D.C.), 12(2), 1978, 143-153. Engl. 18 refs. Also published in Portuguese in *Boletín de la Oficina Sanitaria Panamericana*.

A study of fetal deaths registered in Sao Paulo, Brazil, from June 1, 1968-May 31, 1970 revealed, among other things, a higher incidence of male deaths than female deaths, high rates of fetal deaths associated with multiple pregnancy, a relatively low risk of stillbirth in certain maternal age groups, and an association between congenital anomalies and increasing maternal age. Ways of overcoming apparent reporting difficulties are suggested. Statistical data are included. (Modified journal abstract.)

- 4749 Devadas, R.P., Chandrasekhar, U., Vasanthamani, G., Gayathri, V.** *Evaluation of a mixture based on sunflower meal, Bengal gram flour and sesame on school children.* *Indian Journal of Nutrition and Dietetics* (Coimbatore, India), 14(10), Oct 1977, 291-295. Engl.

Growth and nitrogen retention studies were conducted to evaluate the protein quality of a mixture of sunflower meal, maize meal, Bengal gram flour, and sesame in a ratio of 65:15:10:10. Greater increases in height and weight were reported among a group of 50 Indian children who received the mixture for 5 months as part of their school lunches as compared to a control group who received a supplement of equal energy and protein content. After receiving the supplement, eight healthy schoolchildren aged 9-10 years showed a mean nitrogen retention rate of 72.1%, which was significantly higher than the 37.6% obtained during the control period. Statistical data are included. (DP-E)

- 4750 Devadas, R.P., Jayapoorani, N., Gowri, T.S.** *Nutritional knowledge and practices of the rural homemakers in a post and non ANP block.* *Indian Journal of Nutrition and Dietetics* (Coimbatore, India), 14(7), Jul 1977, 157-160. Engl.

The applied nutrition programme (ANP), which is aimed at the problem of malnutrition in India, is basical-

ly an education programme for the rural areas. In order to test the impact of the programme, the nutritional knowledge of the inhabitants of 15 villages in the Coimbatore district that had participated in an ANP was compared with that of people from 15 villages where no programme had been offered. The results indicated that the ANP's major benefit was the improvement in the nutritional knowledge and practices of local homemakers. The authors stress that education should always be an integral part of a nutrition programme. Statistical data is included. (DP-E)

- 4751 Diaz, B., Gallegos, D., Murillo, F., Covarrubias, E., Covarrubias, T.** *Multinational Andean genetic and health program: II: disease and disability among the Aymara*. Bulletin of the Pan American Health Organization (Washington, D.C.), 12(3), 1978, 219-235. Engl. 35 refs.

The subject of altitude-related disease and disability in high Andes towns and villages has interested the medical community for many years, but, aside from information on risks associated with particular age or occupational groups, data on this subject have been rather limited. To help fill the gap, a number of academic institutions in Bolivia, Chile, Ecuador, Peru, and the USA have been collaborating on a broad research effort known as the Multinational Andean Genetic and Health Program. This article reports the results of the programme stemming from medical examination of 2 096 highland and coastal residents of the Chilean Department of Arica. Statistical data are included. (Modified journal abstract.)

- 4752 Dutta, A., Srivastava, G., Gupta, S.** *Growth pattern of low birth weight infants under one year*. Indian Pediatrics (Calcutta, India), 14(10), Oct 1977, 825-829. Engl. 9 refs.

The growth patterns of 38 preterm Indian babies (gestation less than 37 weeks and birthweight 2 500 g or less), 62 small-for-dates babies (gestation over 37 weeks and birthweight 2 500 g or less) and 100 term babies were studied during the 1st 9 months of life. Preterm and small-for-dates infants doubled their birthweight by age 3 months as compared to age 4 months for term babies. Rates of increase in bodyweight and length of preterm babies were significantly faster than those of term babies in the 1st 3 months and of small-for-dates infants in the 1st 6 months. Statistical data are included. (Modified journal abstract.)

- 4753 Easwaran, P.P., Suri, U., Devadas, R.P.** *Incidence of malnutrition among selected preschool children*. Indian Journal of Nutrition and Dietetics (Coimbatore, India), 13(4), Apr 1976, 95-100. Engl. 9 refs.

The incidence of malnutrition was surveyed among 1 690 children aged 39 months-5 years, who were seen during 1 month as outpatients in Coimbatore (India) at a primary health centre. The main cause of morbidity was protein-energy malnutrition (39.7%); vitamin A deficiency was the 2nd major cause. The family background and dietary patterns of 100 selected children with nutri-

tional deficiencies revealed that most were from lower income families, 41% had been completely weaned by age 3 years and switched to adult diets, etc. The mean daily food intake of 15 selected children was below the recommended intakes for all nutrients studied. Statistical data are included. (Modified journal abstract.)

- 4754 el-Goulli, M., Chelli, H., Chelli, M.** *Mortalité maternelle à la Maternité de l'Hôpital Charles Nicolle de 1972 à 1975; avortements exceptés*. (Maternal mortality in the maternity ward of the Charles Nicolle Hospital from 1972 to 1975; abortions excepted). Tunisie Médicale (Tunis), 55(5), Sep-Oct 1977, 279-284. Fren.

From 1972-1975, maternal mortality in the maternity ward of the Charles Nicolle Hospital (Tunisia) declined by 50% due to improved training in obstetrics, an increase in the number of well-trained midwives and nurses, and greater awareness among women of the importance of proper prenatal care. However, the major causes of mortality, haemorrhage and eclampsia, remain unchanged. Better equipment, blood banks to insure an adequate supply in case of haemorrhaging, and greater prenatal education and care are needed to further reduce maternal mortality. (FM)

- 4755 Enarson, D.A.** *Observations on onchocerciasis in the Sudan Republic: endemicity, intensity of infection and clinical features*. Annals of Tropical Medicine and Parasitology (Liverpool, UK), 41(4), 1977, 465-468. Engl.

A 1975 onchocerciasis survey conducted in two areas of the Sudan assessed microfilarial carriers and density rates, the presence of nodules, and blindness in the male population of 14 villages and in 143 additional male subjects. The results revealed that there was no significant difference between the mean microfilarial density at the buttock in subjects who were and were not blind, total blindness was statistically independent of the presence of microfilariae in the outer canthus, and there were significantly more nodules in blind subjects. The intensity of infection was closely connected with the distance of the village from the river. Statistical data are included. (DP-E)

- 4756 Familusi, J.B., Adesina, V.A.** *Poliomyelitis in Nigeria: epidemiological pattern of the disease among Ibadan children*. Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(3), Jun 1977, 120-124. Engl. 23 refs.

The epidemiological pattern of paralytic poliomyelitis seen in a pediatric clinic in Ibadan, Nigeria, from 1964-1973 is described. The peak incidence was in the 2nd year of life and more than 80% of the patients were aged 6 months-3 years. The occurrence of the disease before 6 months of age in 7% of the cases emphasizes the need for earlier immunization. No seasonal or epidemic pattern was evident and comparison of the incidence of polio with rainfall and temperature showed no significant correlation. An immunization strategy that emphasizes early immunization through infant welfare centres with

quadruple (tetanus, poliomyelitis, diphtheria, and pertussis) vaccine is suggested. (Modified journal abstract.)

- 4757 Fernández, R.A.** *Milk collection, rural development, and a town called Jala-jala.* Initiatives in Population (Manila), 3(2), Jun 1977, 16-22. Engl.

A pilot project in the town of Jala-jala, Philippines, promotes integrated rural development based on dairy farming. A milk collection programme provides a focus for resources and efforts with economic benefits that reach beyond the dairy industry. Farmers are encouraged to use all available resources to increase their milk production; the milk is then processed in Los Baños and the products are sold at subsidized prices in Jala-jala and used in a nutrition programme for children. Aimed at improving the overall standard of living, the project is also involved in family planning, the training of community health workers, and the improvement of water supply systems. (FM)

- 4758 Fleming, B., du Plessis, P.A.** *Reasons for attendance at mobile under-five clinics in rural Zambia.* Medical Journal of Zambia (Lusaka), 11(1), 1977, 16-17. Engl.

A survey of 180 Zambian mothers who brought children to a rural, mobile, well-child clinic revealed that only 55% understood the concept of preventive medicine and the need for regular attendance. Another 41% of attenders brought sick children, indicating the need for curative services as well. The remaining 4% came largely because others attended (the herd instinct). Reasons offered by the mothers interviewed for the non-attendance of other women included problems at home, other children to care for, and husband's disapproval. Statistical data are included. (DP-E)

- 4759 Freerksen, E., Rosenfeld, M.** *Leprosy eradication project in Malta.* Chemotherapy (Basel, Switzerland), 23(5), 1977, 356-386. Engl. 88 refs.

The 1st 5 years of a leprosy eradication programme begun in Malta in 1972 used various treatments that greatly reduced infectiousness and resulted in a high degree of tissue clearance. The authors explain the prerequisites for an eradication programme, including methodology and drug evaluation, and contend that such programmes are realistic. They expect that this programme will eventually solve the leprosy problem in Malta. Statistical data are included. (DP-E)

- 4760 Freiman, I., Hartman, E., Kassel, H., Robins-Browne, R.M., Schoub, B.D.** *Microbiological study of gastro-enteritis in black infants.* South African Medical Journal (Capetown), 52(7), 6 Aug 1977, 261-265. Engl. 27 refs.

From October 1974-October 1975, a survey was carried out at Baragwanath Hospital, Johannesburg, South Africa, to determine the aetiological agents responsible for acute gastroenteritis in black infants. A total of 200 infants aged up to 24 months with gastroenteritis and 189 age-matched controls were studied. Of the two groups, 2 and 4 children were breast-fed and 49 and 51 were partly breast-fed respectively; 95 and 42 were mal-

nourished. Seasonal incidence of different enteropathogens was noted. Incidence of breast-feeding was low and did not allow conclusions on any effect in protecting infants against gastroenteritis. There was an association between malnutrition and diarrhea. Statistical data are included. (Modified journal abstract.)

- 4761 Frezil, J.L., Coulm, J., Alary, J.** *Immunofluorescence indirecte et la stratégie de lutte contre la trypanosomiase humaine en Afrique Centrale. (Indirect immunofluorescence and strategy for control of human trypanosomiasis in Central Africa).* Médecine Tropicale (Marseilles, France), 37(3), May-Jun 1977, 285-289. Fren. 12 refs.

After assessing the reliability of the indirect fluorescent antibody test for human trypanosomiasis with *Trypanosoma gambiense*, the authors submit results of surveys carried out in the People's Republic of the Congo. Analysis of the results has enabled them to compare the classical parasitological screening technique with the immunological method. They have noted that conventional techniques failed to spot some 80% of positive cases. The authors then raise the problem of control strategy in countries with high endemicity. Given the lack of qualified personnel and adequate hospital facilities in these countries, they recommend a systematic treatment of suspected cases. (Modified journal abstract.)

- 4762 Frisancho, A.R., Klayman, J.E., Matos, J.** *Influence of maternal nutritional status on prenatal growth in a Peruvian urban population.* American Journal of Physical Anthropology (Philadelphia, Pa.), 46(2), Mar 1977, 265-274. Engl. Refs.

Anthropometric measurements were made on 4 952 mothers and their newborn infants in Lima, Peru. Based on age-specific percentiles, mothers were separated into categories of short and tall stature, high and low fat, and high and low muscle. Results proved that maternal nutritional status during pregnancy has profound effects on prenatal growth. The data indicated that an increase in maternal calorie reserves results in increased infant fatness but a lesser increase in linear growth. In contrast, an increase in maternal protein reserves enhances both birth weight and prenatal linear growth. Statistical data are included. (Modified journal abstract.)

- 4763 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. Annual Meeting of the American Society of Tropical Medicine and Hygiene, Cincinnati, Ohio, 11 Nov 1977.

On the basis of a number of Venezuelan studies, the author evaluates anti-malaria measures used in different areas of the country. Spraying with DDT is effective when certain conditions are met and spraying is total, sufficient, and regular. However, in the case of refractory malaria, when mosquitoes have developed a resistance to the insecticide, other control measures must be found. The author doubts the possibility of developing a drug that would eliminate parasites in a human organism with

1-2 doses and remain active for a long time. Current research focuses on a new vaccine to prevent rather than cure human infection. (FM)

- 4764 Ganapati, R., Pandya, S.S., Naik, S.S., Dongre, V.V., Desouza, N.G.** *Assessment of school surveys as a method of case detection in an urban area endemic for leprosy.* Indian Journal of Medical Research (New Delhi), 66(5), Nov 1977, 732-736. Engl.

A study was conducted in Bombay, India, to assess the effectiveness of detecting leprosy by school surveys and examinations of family contacts in comparison to whole population surveys. The results showed that, although school surveys and family contact examinations were more economical, they did not result in the identification of a significant number of cases. This observation implied that most cases found in the school surveys had been infected from sources outside the home. It was also noted that the whole population surveys covered only 60% of the adult male group, a shortcoming of potential epidemiological importance. Statistical data are included. (Modified journal abstract.)

- 4765 Ganesapillai, T.** *Analysis of consultation cases in sexually transmitted diseases to the Department of Dermatology, General Hospital, Kota Bharu, Kelantan.* Medical Journal of Malaysia (Singapore), 32(1), Sep 1977, 33-36. Engl.

A study in the Malaysian province of Kelantan indicates that local health workers often fail to detect, diagnose, and treat sexually transmitted diseases correctly. A number of steps are necessary to bring this widespread problem under control. Medical staff need training in diagnosis and treatment and laboratories must be properly equipped. The public must overcome its fear of penicillin, cooperate with doctors in identifying contacts, and practice adequate personal hygiene. Cooperation with Malaysia's neighbours and a well-balanced disease control programme are also needed to curb venereal diseases. (DP-E)

- 4766 Garrocho Sandoval, C., Torres Ruvalcaba, A.** *Diagnosis of intestinal parasitic infestations; study of two methods for collection of specimens.* American Journal of Clinical Pathology (Baltimore, Md.), 67(6), Jun 1977, 603-605. Engl.

In a 1976 Mexican study, two methods of collecting fecal specimens for parasitologic examination were compared: the usual method of collecting samples from different days to be studied separately (triads) and the alternate procedure of mixing three specimens, collected by the patient at home, in a single flask with thimerosal-iodine-formaldehyde as a preservative (blend) in order to save time and effort on the part of the microscopist. A total of 284 stool samples from 71 persons were examined and no significant difference was found in the results when identical specimens prepared by the two techniques were studied. Statistical data are included. (Modified journal abstract.)

- 4767 Gatenby Davies, J.D., Hinreiner, C.** *Incidence of treponemal disease in adult men at Loitokitok, Kajiado district.* East African Medical Journal (Nairobi), 54(5), May 1977, 273-275. Engl.

Sera were collected from 148 males aged 18-55 years attending the Loitokitok Hospital in the Kajiado district of southern Kenya. VDRL and TPHA (*Treponema pallidum* haemagglutination) tests revealed that 11 sera were reactive to both tests and 12 only by the TPHA test. FTA-ABS tests were positive on all 23, so that serological evidence of treponemal infection was present in 15.4% of the patients surveyed, half of whom were pastoral Masai and the other half non-pastoral Bantu. The patients were not examined nor were histories taken, so it is not known whether the results reflected venereal syphilis or the endemic non-venereal form. Statistical data are included. (Modified journal abstract.)

- 4768 Gebre-Medhin, M.** *Maternal nutrition and its effect on the offspring; dietary, anthropometric, biochemical and haematological studies in urban Ethiopia.* Naringsforskning (Goteborg, Sweden), 21(3), 1977, 179-200. Engl. 27 refs.

Comparative dietary studies of upper and lower class pregnant Ethiopian women have shown that lower class women consume fewer nutrients than recommended, lack animal protein and vegetables, and derive 80% of their energy from carbohydrates. Their socioeconomic status is also reflected during pregnancy in reduced maternal weight gain and intrauterine growth. In addition, lower class mothers and infants both show signs of protein-energy malnutrition, although pregnancy anaemia is rare. In this study, the author compares 30 Ethiopian women to a group of Swedish women in terms of dietary intake, anthropometric measurements, plasma amino acid analyses, haemoglobin and vitamin A concentration, and retinal-binding protein. The results are presented as statistical data. (Modified journal abstract.)

- 4769 Gentilini, M., Vernes, A., Pinon, J.M., Sicard, D., Richard-Lenoble, D.** *Etude sérologique de 51 cas de trichinose humaine. (Serological study of 51 cases of human trichiniasis).* Bulletin de la Société de Pathologie Exotique (Paris), 69(6), 1976, 531-538. Fren. 10 refs.

An evaluation of various serological tests for the diagnosis of human trichiniasis is presented. The immunodiagnostic techniques tested were indirect immunofluorescence and two gel precipitation reactions, immunodiffusion and immunoelectrophoresis. It was observed that the induced specific antibodies appeared later than the patient's clinical symptoms of hyper eosinophilia; the delay in appearance of the 1st positives detected was at least 2-3 weeks. Subsequently, the titres rose rapidly and raised levels persisted for several months. Indirect immunofluorescence of excysted larvae remains the technique of choice, because it is rapid, sensitive, and quantitative. The association of fluorescent and precipitation techniques reduces the errors caused by cross reactions with other helminths. (Modified journal abstract.)

- 4770 Ghosh, S., Yayathi, M., Yayathi, T.** *Domestic visualisation: an innovative approach to nutrition education.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(6), Dec 1977, 282-285. Engl.

A new approach to nutrition education developed at the Safdarjang Hospital, New Delhi, India, is described. Emphasizing quantity and common household foods, the programme teaches mothers how to get the most nutritious buy for the least money. Sample diets are based on the normal family diet and modified according to the child's age. Increasing the number of meals per day is encouraged. New mothers are advised on the importance of breast-feeding and the age at which to introduce solid foods. Special commercial baby products are rejected in favour of ordinary food and better cooking methods. Of the 913 children involved in the programme, 77.4% showed a weight gain. (FM)

- 4771 Ghosh, S.** *Nutrition supplementary programme: a reassessment.* Indian Pediatrics (Calcutta, India), 14(6), Jun 1977, 425-426. Engl.

The author questions the effectiveness of food supplement programmes in bringing about long-lasting improvements in the nutritional status of Indian children. In some cases, such programmes can even have harmful effects by encouraging mothers to abandon breast-feeding in favour of milk distributed free at MCH centres, for example. The author recommends that greater emphasis be placed on over-all nutrition education, the ratio of health workers to the population be increased at the village level, and primary care facilities be improved. This, coupled with better sewage disposal and water supply systems, will have a greater effect on nutritional status than isolated food supplement programmes whose benefits are limited to short-term emergencies. (FM)

- 4772 Goldsmith, R.S., Kagan, I.G., Zarate, R., Reyes-González, M.A., Cedeño-Ferreira, J.** *Epidemiologic studies of Chagas' disease in Oaxaca, Mexico.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(3), 1978, 236-250. Engl. 16 refs.

A survey in southern Mexico for antibodies to *Trypanosoma cruzi*, the agent of Chagas' disease, revealed a higher prevalence of these antibodies than had previously been found in Mexico. The data were derived from tests of blood samples collected on filter paper strips from 4 023 inhabitants of 60 communities. Prevalences were particularly marked among subjects aged 25 years and older, 35% of whom were found to be seropositive, and among residents of one village in which 76% of the adults yielded positive results. Statistical data are included. (Modified journal abstract.)

- 4773 Gopaldas, T.** *Project Poshak—an integrated health-nutrition macro pilot study for preschool children in rural and tribal Madhya Pradesh.* In Alternative Approaches to Health Care, New Delhi, Indian Council of Medical Research, 1976, 3-14. Engl.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

Project Poshak, a 1971-1975 government project in Madhya Pradesh (India) designed to provide health services and education and a take-home food supplement for approximately 12 000 children aged less than 3 years and 2 700 pregnant women, is described and evaluated. It was found that: it was feasible to integrate take-home food supplements into existing rural health services; take-home food is a powerful educational tool among illiterate populations; health centre utilization increased by 33%-41%; the nutritional status of the children improved in comparison to that of a control group; approximately half the take-home food ration reached the child for whom it was intended, 10% reached the pregnant mother, and 25% the lactating mother; take-home feeding programmes are as efficient as and less expensive than on-site feeding; etc. (RMB)

- 4774 Grantham-McGregor, S.M., Desai, P., Buchanan, E.** *Identification of infants at risk of malnutrition in Kingston, Jamaica.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(2), 1977, 165-171. Engl. Refs.

A longitudinal study of the growth, health, and environment of 300 infants aged less than 1 year was carried out in Kingston, Jamaica. In order to identify the children at risk of malnutrition, the health care and social backgrounds of the children in the 10th percentile were compared. Many interrelated factors were associated with underweight: low birth weight, poor housing, incompetent mothers, gastroenteritis, poor clinic attendance, and poor milk intake. Identifying these factors may assist field workers in assigning priority to high-risk children and deciding where home visiting is most important. (DP-E)

- 4775 Gueri, M., Jutsum, P., White, A.** *Evaluation of a breast-feeding campaign in Trinidad.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(2), 1978, 112-115. Engl. Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*.

A mass media campaign to promote breast-feeding was organized in 1974 by a Housewives' Association in Trinidad. This article provides an assessment of that campaign, based on interviews with mothers delivering babies at Trinidad's two largest public hospitals just after the end of the campaign. Analysis of these interviews indicates that the campaign reached a large proportion of the target population. There was a high correlation between exposure to mass media and knowledge about breast-feeding. Statistical data are included. (DP-E)

- 4776 Gueri, M., Jutsum, P., Mohammed, I., McDowall, M.F.** *Breast feeding campaigns and hospital practices as factors affecting age of weaning.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(6), Dec 1977, 267. Engl.

Following a mass campaign in Trinidad and Tobago to

encourage breast-feeding, a survey was conducted of 418 new mothers in two hospitals to compare the results of the campaign and the effect of hospital feeding practices on the age of weaning. A recognition test was designed to evaluate the women's awareness of and agreement with the campaign's message. It was found that such campaigns can be effective, but their benefits are often neutralized by hospital practices of bottle-feeding newborns in the nursery before nursing by the mother begins. It is suggested that bottle-feeding in hospitals be discontinued, that newborns be kept with their mothers, and that mothers be encouraged to breast-feed as soon as possible after delivery. (FM)

- 4777 Gulati, P.V., Braganza, C., Singh, K.P., Borker, V.** *Scabies in a semiurban area of India: an epidemiologic study.* International Journal of Dermatology (Philadelphia, Pa.), 16(7), Sep 1977, 594-598. Engl.

An epidemiological survey of 1 727 persons in 253 households in a semiurban area of Goa, India, showed a prevalence of scabies of 9.7% by persons, 22.5% by households, and 22.8% by families. The highest prevalence (23.7%) was in school-age children. Other variables examined were sex, religion, occupation, and family size. Over 90% of infected persons were either children or housewives, probably because the children contracted the disease from contacts in school and transmitted it to their mothers. Statistical data are included. (Modified journal abstract.)

- 4778 Gupta, M.C., Mithal, S., Arora, K.L., Tandon, B.N.** *Effect of periodic deworming on nutritional status of ascariis-infested preschool children receiving supplementary food.* Lancet (London), 2(8065), 16 Jul 1977, 108-110. Engl.

The weight:age ratio of 154 undernourished preschool children receiving supplementary food in an ascariis-infested community in India was monitored for 1 year. Seventy-four children were given tetramisole every 4 months, while 80 controls received a placebo. Stool-positivity rates for ascariasis were significantly lower and nutritional status improved greatly in the treated children. Indications are that periodic deworming by a drug such as tetramisole should form a part of any supplementary feeding programme in an area with a high prevalence of ascariasis. Statistical data are included. (DP-E)

- 4779 Hanegraaf, T.A.** *Endemic goitre in Kenya: an intermediate evaluation of an experimental control programme.* East African Medical Journal (Nairobi), 54(4), Apr 1977, 167-173. Engl.

The effect of several years of experimental iodization of salt in Kenya in terms of decreasing incidence and severity of endemic goitre and iodine excretion was measured in increasing samples of primary school pupils in 1969, 1972, and 1974. The results were disappointing, probably because insufficient amounts of iodine reach the people at risk. The author suggests that most iodized salt be produced locally while the importation of non-iodized

salt be banned or made commercially unattractive. Statistical data are included. (DP-E)

- 4780 Hari, S.** *Greater Vishakha leprosy treatment and health education scheme, Visakhapatnam.* Leprosy in India (New Delhi), 50(2), Apr 1978, 210-213. Engl.

In January 1975, a school survey programme for the detection of leprosy was begun in the city of Visakhapatnam, India. It was designed to cover all the schools every 2 years. During the period from February-December 1977, 87 schools were surveyed and the percentage of leprosy cases discovered was 0.43%. The author stresses the importance of these surveys for the early diagnosis of the disease, the essential 1st step in any leprosy control programme. School surveys also provide information regarding the source of infection, mode of transmission, age and sex distribution, personal habits and living conditions, and socioeconomic factors. (FM)

- 4781 Harinasuta, C., Sucharit, S.** *Observation on the reduction of the prevalence of Malayan filariasis in Chumphon province of south Thailand.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 8(2), Jun 1977, 179-184. Engl.

In 1970 and 1973, the incidence of Malayan filariasis was studied by means of mosquito collection and examination of blood samples from villagers in the Bangluke canton of Chumphon province of South Thailand. Although mass drug treatment was not applied, it was found that after 3 years there was a marked reduction in filariasis in the area. This reduction was attributed to the interruption of the transmission of the filariasis cycle in mosquitoes, which resulted from the DDT spraying operations of the Thai government and to the government's rural development programme, which improved the health and hygiene of the villagers generally. Statistical data are included. (DP-E)

- 4782 Hiatt, R.A., Gebre-Medhin, M.** *Morbidity from Schistosoma mansoni infections: an epidemiologic study based on quantitative analysis of egg excretion in Ethiopian children.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(3), May 1977, 473-481. Engl. 25 refs.

Morbidity from *Schistosoma mansoni* infection was investigated among Ethiopian schoolchildren aged 7-16 years. Malaria was under control in the area and *Schistosoma haematobium* was not endemic. Quantitative fecal egg counts were determined for 336 children by the Kato thick-smear method; other intestinal parasites were determined by the Tichie formol-ether concentration method. Morbidity was measured by a standardized medical examination of 272 children and analyzed in four categories of egg count intensity: 0 (12%), 1-100 (19%), 101-500 (40%), and 501+ (29%) eggs per gram (epg). Prevalence was 88% and the mean count was 259 epg. Other results are noted and discussed; statistical data are included. (Modified journal abstract.)

- 4783 Hira, P.R.** *Observations on Trichomonas vaginalis infections in Zambia.* Journal of Hygiene Epidemiology, Microbiology and Immunology (Prague), 21(2), 1977, 215-224. Engl. Refs.

Microscopy and culture of high vaginal swabs from patients attending a Zambian antenatal clinic showed that 38.5% of the women examined harboured *Trichomonas vaginalis*; the corresponding figure from a gynaecological clinic was 31.4%. The incorporation of the culture method together with direct microscopy as a diagnostic technique in a routine laboratory examination is emphasized. Urine microscopy of male patients revealed a prevalence rate of *Trichomonas vaginalis* of 4.8%. Although the infection is most common in women aged 15-19 years, its presence in young girls suggests that venereal transmission is not the only source. The role of urinary schistosomiasis as a possible cause of urethritis is also discussed. (DP-E)

- 4784 Holland, S.** *Sexually transmitted diseases in Rhodesia; part II.* Central African Journal of Medicine (Salisbury), 22(11), Nov 1976, 216-220. Engl. 50 refs.

A survey of 1 810 African patients shows that venereal diseases are an important, but neglected, social and medical problem in Rhodesia. Accurate statistics are not available because most patients are treated privately and laboratory tests are used in only 10% of diagnoses. Approximately 80% of male infections were contracted from prostitutes and most men had been treated before. Control measures are hampered by social factors such as urbanization, breakdown of traditional morals, labour migration, poverty, poor housing, alcohol abuse, and widespread ignorance. (Modified journal abstract.)

- 4785 Hollins, F.R.** *Heaf survey and tuberculosis control programme in African primary school children in the city of Salisbury.* Central African Journal of Medicine (Salisbury), 23(10), Oct 1977, 227-234. Engl. 13 refs.

A 1975-1976 tuberculosis survey of all African primary school children in Salisbury, Rhodesia, involved some 37 000 children aged 7-14 years. The Heaf multiple puncture method was used for all testing. Results showed a close similarity in positive rates for both sexes. Follow-up studies on those with positive reactions prove that disease control measures and treatment are successful. The low reaction rate at school entry indicates a low risk of infection for young children in both the city and the country, where they spend several months of the year. The author concludes that tuberculosis is not a major problem in Salisbury. (FM)

- 4786 Horner, M.R., Harris, W.S., Brownlee, B.J., Goldstein, R.S., Taylor, A.K.** *Anthropometric and dietary study of Miskito Indian children in rural Nicaragua.* Ecology of Food and Nutrition (London), 6(3), 1977, 137-145. Engl. Refs.

The nutritional status of 304 Miskito Indian children aged 0-5 years was assessed in 3 villages in northeastern Nicaragua in 1975. Anthropometric measurements showed evidence of chronic, but not current, malnutri-

tion. Dietary intake data revealed major deficiencies in the current levels of food intake, which were reflected in below average height. Growth rates dropped sharply during the 2nd year, coinciding with the infant weaning period. Energy was the major dietary deficit and the most inadequate nutrient intake was that of vitamin A. It was also found that the use of the mid-arm circumference as an indicator of malnutrition was unreliable in this sample. (Modified journal abstract.)

- 4787 Hunponu-Wusu, O.O., Somorin, A.O.** *Onchocerciasis in Nigeria: observations on the geographical basis of the endemicity in Lagos.* Journal of Tropical Medicine and Hygiene (London), 80(6), Jun 1977, 129-131. Engl. Refs.

The cases of 95 Nigerian patients suffering from onchocerciasis are examined. The majority were young adults with no ocular complications, which suggests the rain forest type of African onchocerciasis. A study of the geographic distribution revealed that the majority came from endemic foci outside Lagos, but the discovery of 5 patients from Lagos State, and, in particular, from Lagos City, indicates that there is still a focus somewhere in Lagos. The public health importance of onchocerciasis is briefly discussed. Statistical data are included. (Modified journal abstract.)

- 4788 Jansen, A.A.** *Malnutrition and child feeding practices in western Samoa.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(6), Dec 1977, 293-306. Engl. 11 refs.

A study of child feeding practices in western Samoa revealed that protein-energy malnutrition, eventually combined with vitamin A deficiency and anaemia, was common among toddlers and preschool populations. In some cases, severe malnutrition could be averted by earlier introduction of solid foods into the infant's diet, especially animal protein, vegetables, and fruit. Many women seemed ignorant about the nutritional needs of their children and were still bound by cultural taboos. In Apia, an urban centre, breast-feeding was giving way to bottle-feeding and birth intervals were becoming shorter. Nutrition education and extended family planning services are recommended. Statistical data are included. (Modified journal abstract.)

- 4789 Jansen, G.R., Jansen, N.B., Shigetomi, C.T., Harper, J.M.** *Effect of income and geographic region on the nutritional value of diets in Brazil.* American Journal of Clinical Nutrition (Bethesda, Md.), 30(6), Jun 1977, 955-964. Engl. 26 refs.

The influence of income level, region, and urbanization on the nutritional quality of dietary patterns in Brazil was studied. Low income affected the total quantity and availability of food to the family rather than the nutritional quality. Riboflavin and calcium were low in low-income groups in all regions, particularly urban. Thiamin intake was marginal in urban areas at all income levels. Generally, protein quality appeared to be relatively independent of income, but the total availability of protein and calories was greatly dependent on

income and the lowest income families were seriously short of food. (Modified journal abstract.)

- 4790 Jenkins, T.** *Role of screening in the prevention of inherited disease in South Africa.* South African Medical Journal (Capetown), 51(23), 4 Jun 1977, 832-837. Engl. 17 refs.

The value of screening for inherited disorders and the availability of this service in South Africa are discussed. Diseases that can be diagnosed by this method include phenylketonuria and other aminoacidurias, galactosaemia, hyperlipaemia, Tay-Sachs disease, and haemoglobinopathies such as sickle-cell anaemia and thalassaemia. Screening can alert the family to the need for antenatal diagnosis where feasible, ensure that early treatment is given to affected infants, and assist carriers to reach a decision about having children. Facilities for certain types of screening already exist in some centres in South Africa and new techniques will be introduced in the future. (Modified journal abstract.)

- 4791 Johnson, J.L., Williams, C.N., Weldon, K.L.** *Nutrient intake and meal patterns of Micmac Indian and Caucasian women in Shubenacadie, NS.* Canadian Medical Association Journal (Ottawa, Ont.), 116(2), 18 Jun 1977, 1356-1359. Engl. 20 refs.

From October 1975-June 1976, a survey was taken of the nutrient intakes and meal patterns of 120 Micmac Indian women and 115 Caucasian women in Nova Scotia, Canada. Anthropometric measurements were also collected. Results showed significant differences in: intakes of protein, vitamin A, and niacin; length of overnight fast; range of energy intake; energy from carbohydrates; and energy from protein. At all ages in both groups, the median intake was below the recommended average for energy, calcium, iron, and thiamin. Indian women consumed less protein and were significantly more obese, especially in the older age group. (Modified journal abstract.)

- 4792 Jordan, P.** *Schistosomiasis—research to control.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(5), Sep 1977, 877-886. Engl. 19 refs.

A comparative evaluation was made of snail control, chemotherapy, and provision of water supplies as alternatives of schistosomiasis transmission control in three different areas of St. Lucia. After 2 years of control, chemotherapy reduced incidence of the disease from 18.8%-4%; snail control, from 22%-9.8%; and provision of water supplies, from 22.7%-11.3%. Annual cost *per capita* in the 1st 2 years was \$1.10 (chemotherapy), \$3.70 (snail control), and \$4.99 (water supply). Chemotherapy was the cheapest and most effective method of transmission interruption and disease control. The advantages of each method are examined and statistical data are included. (Modified journal abstract.)

- 4793 Joseph, S.W., Carney, W.P., van Peenen, P.F., Russell, D., Sulianti Saroso, J.** *Human parasitoses of the Malili area, South Sulawesi (Celebes) prov-*

ince, Indonesia. Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 9(2), Jun 1978, 264-271. Engl. 12 refs.

In a biomedical survey of the inhabitants of 9 villages in southern Indonesia, blood specimens were examined for malaria and microfilariae and stool specimens for intestinal parasites. Malayan filariasis was endemic in all villages, with an overall prevalence of detectable microfilariae of 15%, although malaria was rare. Some 97% of the population examined had one or more of the following intestinal parasites: *Ascaris lumbricoides* (74%), *Trichuris trichiura* (65%), hookworm (62%), *Entamoeba coli* (38%), *Endolimax nana* (10%), *Entamoeba histolytica* (6%), etc. Statistical data are included. (DP-E)

- 4794 Jubiz Hasbún, A., Sánchez M., C.C.** *Mortalidad materna comparativa entre dos periodos: 1963-1967, 1968-1972. (Comparative maternal mortality during two periods: 1963-1967, 1968-1972).* Revista Colombiana de Obstetricia y Ginecología (Bogota), 27(3), May-Jun 1976, 129-136. Span.

The causes of 104 maternal deaths that occurred in the University Hospital of St. Vincent de Paul, Medellin, Colombia, from 1963-1972 are analyzed and compared to those occurring in the 1st and 2nd halves of that period. Briefly, the major causes of death during the 10-year period were infections (40.38%), haemorrhages (25%), and toxemias (19.23%). The 2nd 5-year period was marked by a decrease in the number of deaths due to haemorrhage, a corresponding increase in toxemias, and an appreciable increase in the incidence of septic abortion. Seven tables of data are included and the authors call for better prenatal care, health education, and hospital management of complications. (HC-L)

- 4795 Kabir, M.** *Levels and patterns of infant and child mortality in Bangladesh.* Social Biology (Chicago, Ill.), 24(2), 1977, 158-165. Engl. 15 refs.

Utilizing the 1974 retrospective survey data and registration data collected by the Cholera Research Centre for 1967-1968 and the Population Growth Experiment for 1962-1963, this study attempts to measure child and infant mortality levels in Bangladesh and determine their distribution. The Brass child mortality technique is used to convert proportions dead among children ever born to women in the child-bearing ages into conventional life table measures of mortality. Shortcomings of present methods of measuring infant and child mortality in developing countries are discussed. (Modified journal abstract.)

- 4796 Kandiah, N., Boo, L.J.** *Nutritional status in a rural estate community.* Medical Journal of Malaysia (Singapore), 31(4), Jun 1977, 270-272. Engl.

A nutritional survey of 518 members (46.6% of the population) of an Indian estate community in Selangor, Malaysia, revealed that: 20% of preschoolers, 13.9% of boys, 11% of girls, 44.5% of adult males, and 20.2% of

adult females were underweight; 47.4% of preschoolers, 47.2% of schoolchildren, and 68.6% of adult females had anaemia; hookworm, roundworm, and whipworm infestations were common in all cases of anaemia; 79% of women breast-fed their children; etc. Family planning acceptance was poor. Other common problems included dental caries and vitamin deficiencies. Statistical data are included. (DP-E)

- 4797 Khan, A.A., Gupta, B.M.** *Social and economic factors in malnourished children around Lusaka, Zambia.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(3), Sep 1977, 283-287. Engl.

The social and economic circumstances of 360 malnourished children treated in a clinic in suburban Lusaka (Zambia) are surveyed. The peak age for protein-energy malnutrition was 12-18 months, the weaning period. The worst time of the year for malnutrition was the rainy season (November-March) when infections are particularly common. Study results also revealed that most malnourished children were from small, low-income families; early weaning and large families, often implicated in malnutrition, are not factors here. Statistical data are included. (Modified journal abstract.)

- 4798 Khana, K., Nagar, S.V.** *Creches in urban project.* Indo-Dutch Project for Child Welfare Newsletter (Hyderabad, India), 2(1), Jun 1978, 7-8. Engl.

Two creches with feeding programmes were founded in Hyderabad (India) for children aged 12-30 months to help improve the health and nutritional status of the children and at the same time educate their mothers in child rearing practices, nutrition, health, and hygiene. Preference was given to children of the lower socioeconomic classes and especially of working mothers. Local mothers were trained to supervise the children and run the creches. One of the significant achievements of these creches has been bridging the gap between different sections of the community and bringing different social classes together. (DP-E)

- 4799 Kloos, H., Lemma, A.** *Schistosomiasis in irrigation schemes in the Awash valley, Ethiopia.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 26(5), Sep 1977, 899-908. Engl. 23 refs.

From December 1971-August 1973 and October 1975-July 1976, surveys were made of the prevalence of schistosomiasis in 16 irrigation farms in the Awash Valley (Ethiopia), some nearby villages of indigenous pastoralists and subsistence farmers, and 21 highland towns and villages. The results indicated that *Schistosoma mansoni* is endemic only in the upper part of the Awash Valley, that it is absent from most home areas of the migrant farm workers but highly prevalent in some localities, and *S. haematobium* is endemic only in the swamps and some lakes in the middle and lower parts of this valley. Statistical data are included. (Modified journal abstract.)

- 4800 Knutzen, V.K., Malan, A.F.** *Perinatal mortality in Cape Town.* South African Medical Journal (Capetown), 51(19), 7 May 1977, 668-671. Engl. 14 refs.

Perinatal mortality in Capetown, South Africa, has progressively decreased in all racial groups over the past 60 years. The perinatal death rate for blacks and those of mixed race remains at 20:1 000 more than for Caucasians. While the stillbirth rate approximates the early neonatal death rate in Caucasians, the stillbirth rate for other groups is double the rate for early neonatal deaths. The major component of perinatal loss for these groups is stillbirths, 80% of which occur before the onset of labour. Focus should be on the detection of the fetus at risk with, perhaps, earlier intervention. Statistical data are included. (Modified journal abstract.)

- 4801 Knutzen, V.K., Davey, D.A.** *Relationship between maternal height and weight at booking and perinatal mortality.* South African Medical Journal (Capetown), 51(19), 7 May 1977, 672-675. Engl. 17 refs.

In 1972, a study was made of 15 251 women delivered in the maternity services of Capetown, South Africa, to determine the distribution and effects of maternal height and booking weight in the three main ethnic groups: Caucasian, black, and mixed race. The short, thin woman of mixed race had the highest perinatal mortality and fetal loss in this group was associated with preterm delivery, stillbirth before labour, and fetoplacental inadequacy. Maternal height is an indicator of nutrition in childhood and maternal weight an indicator of more recent nutrition. Weight gain in pregnancy is particularly important in short, thin individuals. Statistical data are included. (Modified journal abstract.)

- 4802 Koplan, J.P., Lewis, M.J., Ali, S.** *Epidemiological characteristics of tetanus in Trinidad (1973-1975).* West Indian Medical Journal (Mona, Jamaica), 26(3), 1977, 144-149. Engl.

Data concerning the epidemiology of tetanus are extracted from the medical records of 88 persons treated for the disease at two hospitals in Trinidad from 1973-1975. Distribution by sex was unremarkable except for the group aged 20-49 years, in which males predominated. The fatality rate was 30% with no significant difference in sex, type of injury, or location. Fatal tetanus cases had a shorter incubation period, which suggests that this can be an important prognostic indicator. Immunization status was not recorded for 66% of the cases and recommendations are made for improving this situation as well as for increasing immunization coverage. (FM)

- 4803 Koshy, A., Raina, V., Sharma, M.P., Mithal, S., Tandon, B.N.** *Unusual outbreak of hookworm disease in north India.* American Journal of Tropical Medicine and Hygiene (Baltimore, Md.), 27(1), Jan 1978, 42-45. Engl. 23 refs.

An unusual outbreak of hookworm disease occurred after a game of *kabaddi*, a local game involving much body contact with the ground, in 27 males aged 16-26

years from an Indian village. It was characterized by an immediate incapacitating dermatitis and severe pulmonary symptoms, followed by progressive weakness, abdominal pain, weight loss, and anaemia after a few months, with *Ancylostoma duodenale* in all except four patients who received anthelmintic treatment. Specific treatment for hookworm resulted in complete clinical recovery. Unusual features of the outbreak are discussed. (Modified journal abstract.)

- 4804 Kuroiwa, Y., Hung, T.P., Landsborough, D., Park, C.S., Singhal, B.S., Soemargo, S., Vejajiva, A., Shibasaki, H.** *Multiple sclerosis in Asia*. Neurology (Minneapolis, Minn.), 27(2), Feb 1977, 188-192. Engl. 33 refs.

Using a format similar to that used in a previous Japanese survey, information on 61 cases of multiple sclerosis was collected from 6 neurologic centres in 5 Asian countries, excluding Japan. Multiple sclerosis appears to be a rare disease throughout Asia. Certain clinical characteristics that had been previously noted in Japan and other individual Asian surveys were again observed in the present study. When compared with Western multiple sclerosis, the Asian cases showed a relatively higher frequency of optic nerve involvement, frequently bilateral and severe, at the onset as well as during the course of the illness and no rare occurrence of Devic's syndrome. (Modified journal abstract.)

- 4805 Lambert, J., Basford, J.** *Port Moresby infant feeding survey*. Papua New Guinea Medical Journal (Port Moresby), 20(4), Dec 1977, 175-179. Engl.

A survey of the infant feeding practices of 136 mothers was carried out in Port Moresby, Papua New Guinea, to determine the extent of artificial feeding in an urban area and the effect of this method of feeding on the nutritional status of the infants. Over one third of the infants seen were artificially fed; of these, 69% were malnourished, compared to 26% of the breast-fed infants. It is recommended that steps be taken by the Department of Health to heighten awareness of the advantages of breast-feeding by emphasizing its low cost and convenience as well as its nutritional value. (Modified journal abstract.)

- 4806 Lapido, O.A., Adelusi, B.** *Birthweights of Nigerian children at Ibadan*. East African Medical Journal (Nairobi), 54(1), Jan 1977, 31-37. Engl. 19 refs.

In a June 1973-December 1974 study of the birth weights of 1 193 children born at the University College Hospital in Ibadan, it was shown that the mean birth weights of Nigerian children are similar to those of infants from other areas, even though the incidence of low birth weights was higher. Various reasons, including socioeconomic factors, the high incidence of multiple pregnancies, and the fact that the hospital deals mainly with abnormal obstetric emergencies, were cited to account for this difference. The need for a larger and more nationally acceptable study is emphasized. Statistical data are included. (Modified journal abstract.)

- 4807 Lesser, R., Watt, M.** *Untrained community help in the rehabilitation of stroke sufferers with language disorder*. British Medical Journal (London), 2(6144), 14 Oct 1978, 1045-1048. Engl. 14 refs.

The Newcastle Speech-After-Stroke Project is one of many schemes in the UK that use untrained helpers to set up community clubs and home visiting for dysphasic stroke sufferers. To examine the contribution to rehabilitation made by such activities, patients' language abilities and social confidence were assessed when they entered the project and after 6 months. Formal tests of language showed no significant improvement after 6 months, but social confidence increased. It was concluded that such projects can help patients regain a role in the community but cannot provide much direct help in the recovery of language. Statistical data are included. (Modified journal abstract.)

- 4808 Levin, S.** *Aids to lactation*. South African Medical Journal (Capetown), 51(17), 23 Apr 1977, 568. Engl.

A letter describes the device Lactaid, which has been used in the USA for over 5 years. It consists of a plastic bag filled with milk and provided with a long, soft plastic tube through which the infant obtains extra milk while breast feeding. Experiments are described with a cheaper device, a 20 ml syringe with a rubber tube; local plastic tubing was too hard. For about 35% of the mothers, there was some improvement in lactation, but usually for only a few days. Such auxiliary feeding seemed a little more effective than galactogogues given by the mouth. (Modified journal abstract.)

- 4809 Liu, K.L.** *Dental condition of two tribes of Taiwan aborigines: Ami and Atayal*. Journal of Dental Research (Chicago, Ill.), 56(2), Feb 1977, 117-127. Engl. 24 refs.

Annual Session of the American Association of Dental Research, New York, N.Y., Apr 1975.

An epidemiological and anthropological study of dental and oral conditions of Taiwan Aborigines was carried out on 166 adolescents from the Ami tribe and 128 from the Atayal. The very low incidence of dental caries and periodontal disease that was found is probably related to their good dietary habits, good oral hygiene, and dental occlusion. There was no statistical difference between the two groups except in dental occlusion, which is better among the Atayal. Anthropologically, there were no differences in mesiodistal and buccolingual crown diameters, but the Atayal have a deeper dental arch. As for dental morphology, the Taiwan Aborigines have a high frequency of shovel-shaped incisors and Carabelli's trait. (FM)

- 4810 López Rico, A., Díaz Castro, J.** *Mortalidad por las enfermedades infecciosas y parasitarias en la ciudad de Veracruz en 1970 y en 1975. (Mortality from infectious and parasitic diseases in the city of Veracruz in 1970 and 1975)*. Salud Pública de México (Mexico City), 18(6), Nov-Dec 1976, 1017-1025. Span.

The mortality from parasitic and infectious diseases was 448.4: 100 000 inhabitants of Veracruz, Mexico, in 1970 and 201.5 in 1975; distribution by age, sex, and disease is given. The incidence of diarrhea, which is common in infants aged less than 2 years, decreased due to improved treatment and better water and sewerage systems. Although the death rate from tuberculosis is higher than in other areas, the disease is not considered a major problem. There were 17.4 deaths: 100 000 inhabitants from infectious hepatitis in 1970 (probably an unregistered epidemic) and 0.4 in 1975. Deaths from tetanus have increased from 10.5-13.9: 100 000; health educators must strive to reverse this trend. Statistical data are included. (Modified journal abstract.)

4811 Lyth, R.E. *Experiment in community welfare.* Proceedings of the Royal Society of London, Series B, Biological Sciences (London), 199(1134), 1977, 151-160. Engl.

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

In 1965, the Church of Uganda initiated a programme, the Christian Rural Service, to help raise the health and living standards of the people of the district of Kizegi in southwest Uganda by involving the 600 000 Bantu inhabitants of the area in self-help schemes. This article describes the programme's operational principles, its tiny beginnings and rapid expansion, and its successes and failures in organizing villagers, teaching basic health care and agricultural techniques, and training new workers. The author reports that the programme, now run and financed entirely by the natives, has greatly improved many aspects of the people's lives. (DP-E)

4812 Maddocks, D.L., Maddocks, I. *Health of young adults in Pari village.* Papua New Guinea Medical Journal (Port Moresby), 20(3), Sep 1977, 110-116. Engl.

This study examines the health status and morbidity patterns of young adults in the village of Pari, Papua New Guinea. Most of the diseases in this group are minor or transitory; the most common are skin lacerations, respiratory illnesses, diarrheal diseases, and eye and ear infections. Data on body weight show that there is an increase in weight during early adulthood and a greater number of obese persons in this area than in other Papua New Guinea populations. Social, economic, and cultural changes that have accompanied the transition from a traditional way of life to a modern one have also had an effect on physical and mental health. Statistical data are included. (FM)

4813 Madkour, M., Khalifa, A.S. *Critical view of B.C.G. vaccination programme in Egypt.* Journal of Tropical Medicine and Hygiene (London), 80(7), Jul 1977, 144-146. Engl. 14 refs.

A post-vaccination tuberculin survey was carried out in Egypt to assess the effectiveness of the BCG vaccination programme begun in 1956. A total of 1 138 infants aged less than 2 years were examined. It was found that 55% had never been vaccinated. Of those who had, 69.2% showed negative tuberculin sensitivity, indicating that

the vaccine had been improperly administered. Fear of possible complications was the major reason for the low vaccination rate. Malnutrition, the faulty technique of poorly trained health workers, and damage to the vaccine during transport, storage, or distribution were held responsible for the low incidence of tuberculin sensitivity. (FM)

4814 Mahfudin, H., Partono, F., Purnomo, Idris, K.N. *Parasitological and clinical survey of Bancroftian filariasis in Kepu district, central Jakarta, Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 8(2), Jun 1977, 173-178. Engl. 8 refs.

During a blood and clinical survey for Bancroftian filariasis made in June 1976, about 90% of the 614 inhabitants of the Kepu district of central Jakarta were examined. The microfilarial rates were 4.5% in the males and 3.3% in the females; most of the carriers were asymptomatic. Other findings revealed that the microfilarial density was low, there were 15 persons (11 males) with the signs and symptoms of filariasis, and the total filariasis rate was 6.7%. The percentage of infected persons increased with years of residency and persons living in poorly-built houses had higher microfilarial and disease rates. (Modified journal abstract.)

4815 Maiwald, H.J., Borroto, R., de Zayas, B. *Kariesverbreitung bei kubanischen Kindern in Gebieten mit überwiegendem Konsum von braunem und raffiniertem weissen Zucker.* (Caries incidence in Cuban children in areas where brown or refined sugar is consumed). Stomatologie (Sofia), 24(9), Sep 1974, 586-592. German. Refs.

A total of 800 children aged 6-13 years from a large town in Cuba (La Habana-Marianao, where white sugar contributes 73.4% of the total sugar intake) and a rural district (Gibara, where brown sugar contributes 90% of the total sugar supply) were examined stomatologically for caries, oral hygiene, and periodontal disease. Caries incidence was 20% lower in the children from the rural district than in those from the town. In addition, rural children had better oral hygiene and a lower incidence of periodontal disease. These differences are attributed to the change in food habits due to the supply of brown sugar and a reduced intake of sweets and cakes. Statistical data are included. (Modified journal abstract.)

4816 Majia, L.A., Hodges, R.E., Arroyave, G., Viteri, F., Torun, B. *Vitamin A deficiency and anemia in Central American children.* American Journal of Clinical Nutrition (Bethesda, Md.), 30(7), Jul 1977, 1175-1184. Engl. 34 refs.

In order to investigate the role of vitamin A in the prevalence of anaemia in Central America, a retrospective evaluation of the data of six previous nutrition studies was carried out. Children aged 1-12 years living 0-2 500 feet above sea level were studied. Several biochemical and dietary parameters related to anaemia were correlated with plasma levels of retinol. The findings suggest that a relationship exists between vitamin A

deficiency and anaemia. Statistical data are included. (DP-E)

- 4817 Mak, J.W., Cheong, W.H., Hassan bin Omar, A., Sivanandam, S., Mahadevan, S.** *Filariasis in Perlis, peninsular Malaysia*. Medical Journal of Malaysia (Singapore), 31(3), Mar 1977, 198-203. Engl. Refs.

In a combined parasitological and entomological survey for filariasis carried out in Perlis, Malaysia, in 1975, 858 people from 8 kampongs were examined. One kampung had an infection rate of 9.7% (7 out of 72) and a 2nd had a rate of 0.7% (1 out of 148). Two cases of elephantiasis of the lower limbs were seen. None of the mosquitoes examined were infected with filarial parasites. The low prevalence of filariasis and its vectors in this area was probably due to periodic DDT spraying since 1967 under the Malaria Eradication Programme; in addition, no clinical case was aged less than 17 years. Statistical data are included. (DP-E)

- 4818 Margo, G., Baroni, Y., Wells, G., Green, R., Metz, J.** *Protein energy malnutrition and nutritional anaemia in preschool children in rural KwaZulu*. South African Medical Journal (Cape-town), 53(1), 7 Jan 1978, 21-26. Engl. 30 refs.

In 392 black children aged 13-60 months living in a poor rural area of KwaZulu, the overall prevalence of protein-energy malnutrition (PEM) was 16.4%, but only 2.7% suffered from severe PEM. Anaemia, almost invariably associated with iron deficiency, was present in 6.7%. No relationship was found between ecological factors such as income, educational status, etc., and any of the anthropometric, biochemical, or haematological variables. Indeed, the prevalence of PEM in a comparable group of underprivileged urban children was higher. Further investigation is advocated. Statistical data are included. (Modified journal abstract.)

- 4819 Masembe, R.N.** *Pattern of bacterial diarrhoea of the newborn in Mulago Hospital (Kampala)*. Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(4), Apr 1977, 61-65. Engl. 9 refs.

Association of Physicians of East and Central Africa Meeting, Kampala, Uganda, Jan 1976.

A 3-year retrospective study of 4 638 babies admitted to the Mulago Hospital Special Care Unit in Kampala, Uganda, was carried out in order to determine the frequency and causes of diarrhea in newborns. Data were collected on birthweights, bacterial gastroenteritis, microbiology records, positive cultures of rectal swabs, and the organisms involved. A 6-month study of clinical features and mortality in infected babies was also done. The findings indicate a high rate of morbidity resulting from infantile diarrhea. Statistical data are included. (DP-E)

- 4820 Mason, J., Hobbs, J.** *Malaria field studies in a high-incidence coastal area of El Salvador, C.A.* Bulletin of the Pan American Health Organiza-

tion (Washington, D.C.), 11(1), 1977, 17-30. Engl. 8 refs.

From 1968-1973, the Central American Research Station carried out three studies of malaria incidence patterns in a small, high-incidence region of El Salvador with a population of about 6 000 permanent residents and 3 000-4 000 migrant workers. The results are discussed and presented as statistical data. The authors attribute the low levels of *P. falciparum* cases observed in 1971 and 1972 to a mass distribution of antimalaria drugs during the preceding 2 years; the cumulative curative effect may have been enough to eradicate the disease from the area unless it is reintroduced by migration. The viability of *P. vivax* is also examined. (DP-E)

- 4821 Matovu, D.B.** *Prospects of schistosomiasis at the Kidatu dam project in Tanzania*. Tropical and Geographical Medicine (Haarlem, Netherlands), 29(3), 1977, 266-270. Engl.

A schistosomiasis survey was carried out to determine the present and future potential for schistosomiasis transmission at the site of the Great Rusha Power Project at Kidatu, Tanzania. Although a few cases of the disease in the human population were recorded at the dam site and in the future reservoir lake areas, they were probably contracted elsewhere as both areas were considered unlikely habitats for the snail transmitters of schistosomiasis. Higher prevalence rates were registered in neighbouring areas, where various snail vectors were found. Statistical data are included. (Modified journal abstract.)

- 4822 Mburu, F.M., Smith, M.C., Sharpe, T.R.** *Determinants of health services utilization in a rural community in Kenya*. Social Science and Medicine (Oxford, UK), 12(4A), Jul 1978, 211-217. Engl. 37 refs.

The social, structural, and health policy aspects related to the use of childhood vaccination in Machakos, Kenya, are outlined. Children who have had BCG and smallpox vaccinations are likely to have received all other immunizations, so the incidence of these two scars was used to determine which children aged 1-4 years had received preventive care. A multivariate analysis revealed six health behaviour related components: demographic structure, cosmopolitaness, health consciousness, attitudes toward health care, awareness of modern health services, and the presence of significant references. It is concluded that social structure and health policy are the most important determinants of community health care. (Modified journal abstract.)

- 4823 McCusker, J., Smith, D.L.** *Field trial of BCG immunization using the WHO bifurcated needle*. East African Medical Journal (Nairobi), 54(5), May 1977, 242-249. Engl. 8 refs.

This 1973-1974 study of Tanzanian children from 15 primary schools in Dar-es-Salaam compared the results of BCG vaccination by the standard intradermal method with those obtained by six vaccinators using the bifurcated needle technique and one placebo vaccinator. There was a significant between-vaccinator variation in the

post-immunization tuberculin sensitivity produced by the six bifurcated needle vaccinators but no increase in complications. The authors feel that use of the bifurcated needle technique may be acceptable under certain conditions, particularly when a combined small-pox/BCG immunization programme is planned. (Modified journal abstract.)

- 4824 Mehta, S., Nath, N., Thukural, S., Pasricha, S.** *Growth profile of preschool children from an urban low socio-economic community in India.* Tropical and Geographical Medicine (Haarlem, Netherlands), 29(2), 1977, 177-186. Engl. Refs.

A 5-year study on the growth and development of 68 infants was carried out in a poor urban community in India. Protein-calorie malnutrition (PCM) of varying degree was present in 94% of the subjects at some time; 30% of these suffered from severe PCM. The effect on height and head circumference followed the same pattern as body weight. Developmental quotients correlated with the degree of PCM to the age of 4 years, indicating a growth profile of underprivileged children far worse than that shown by cross-sectional surveys. The greatest risk exists with a young mother who is unfamiliar with breast-feeding and supplemental feeding techniques. An additional factor is the early onset of diarrheal diseases. (DP-E)

- 4825 Meme, J., Hillman, D.** *Infants of low birth-weight seen at the Kenyatta National Hospital.* East African Medical Journal (Nairobi), 54(1), Jan 1977, 27-30. Engl. 29 refs.

A 1975 study of 177 low-birth-weight babies admitted to the Kenyatta National Hospital in Nairobi, Kenya, showed that 34.4% of these infants were small for their gestational ages while 74.4% were premature. Consequently, the majority of the babies were premature but of normal weight for their gestational ages. Twin pregnancies, high altitudes, and maternal malnutrition are discussed as possible factors in the high incidence of low birth weights. Statistical data are included. (DP-E)

- 4826 Merlin, M., Rivière, F., Kaeuffer, H., Laigret, J.** *25 ans de campagnes de masse antifilariennes en Polynésie française. (25 years of antifilarial mass campaigns in French Polynesia).* Médecine Tropicale (Marseille, France), 36(6), Nov-Dec 1976, 631-640. Fren. 23 refs.

At the end of World War II, blood surveys in Tahiti showed the highest prevalence of filariasis in the South Pacific area. The past 25 years of surveillance and disease control measures, which reduced the original rate by 90%, are evaluated and suggestions for disease control programmes are made. In the human carrier population, mass treatment with hetrazan (DEC) makes it possible to stabilize the endemicity to a low rate, even with spaced treatments. To reach an effective eradication, it is necessary also to control the mosquito population, which is best done by health education and biological control. (Modified journal abstract.)

- 4827 Miller, D.C., Nichaman, M.Z., Lane, J.M.** *Simplified field assessment of nutritional status in early childhood: practical suggestions for developing countries.* Bulletin of the World Health Organization (Geneva), 55(1), 1977, 79-86. Engl. 15 refs.

Also published in French and Russian.

This paper proposes a simple and inexpensive method for the field assessment of certain objective indicators of nutritional status in children of preschool age. It emphasizes the need for statistically valid sample selection and presents a design for randomly selecting 30 children from each of 30 village sizes in each region for which quantitative inferences are to be made, the main purpose being to estimate the prevalence of protein-energy undernutrition and anaemia. The need to train indigenous paraprofessional workers as assessors and periodically to control their accuracy is stressed. It is recommended that the method used be supplemented by detailed ecological analysis to determine causal factors and propose remedial action. (Journal abstract.)

- 4828 Mishra, M., Gupta, M.** *Growth pattern of preschool children in new Bhopal area.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(2), Feb 1978, 38-41. Engl. 8 refs.

Weight, height, and chest and arm circumference were measured in a survey of 450 Indian schoolchildren aged 3-5 years in Bhopal. Socioeconomic and demographic data were also collected. The comparison of the data on the physical measurements of boys and girls with parallel studies in Indian literature demonstrated that the mean values in different age groups for all characteristics were average for this group when measured against a broad range of Indian children. The mean values are higher for boys than for girls in all age groups. Statistical data are included. (DP-E)

- 4829 Moncayo Medina, A.** *Situación de algunas enfermedades transmisibles susceptibles de prevenirse en la población infantil. (Situation of some infectious, preventable diseases in the child population).* Revista de la Escuela Nacional de Salud Pública (Medellín, Colombia), 1(3), Jul-Dec 1975, 77-88. Span. 12 refs.

Following a brief explanation of epidemiological methods and data interpretation, this paper presents the epidemiological situation of the following infectious, preventable diseases in Colombia's child population: whooping cough, diphtheria, tetanus, poliomyelitis, tuberculosis, measles, diarrhea and enteritis, and respiratory diseases. Five tables and five graphs of statistical data on morbidity and mortality and immunization levels are included. (HC-L)

- 4830 Monteiro, C.A., Ferreira Réa, M.** *Classificação antropométrica como instrumento de investigação o epidemiológica da desnutrição protéico-calórica. (Anthropometric classification as a tool of epidemiological investigation of protein-calorie malnutrition).* Revista de Saúde Pública

(São Paulo, Brazil), 11(3), 1977, 353-361. Portuguese. 22 refs.

The nutritional status of 179 children aged 6 months-5 years from families of low socioeconomic status living in the city of São Paulo, Brazil (group 1), and of 913 children of the same age living in Vale do Ribeira, a tea and banana growing area (group 2), was studied by anthropometric measurements and compared. When the Gomez classification was used, 50.3% of group 1 and 49.5% of group 2 had different grades of protein-energy malnutrition. By Kanawati's method, 13.9% and 27.8%, respectively, were below normal height and, by the classification of Macias, 27.9% and 11.6% showed signs of malnutrition. According to the Seoane classification, 36.3% and 35% were malnourished. (Modified journal abstract.)

- 4831 Morais-Rochon, T., Bernard, L.E.** *Surveillance de la santé à l'école maternelle. (Health surveillance in schoolchildren).* Canadian Medical Association Journal (Ottawa, Ont.), 118(3), 4 Feb 1978, 270-274. Fren. 14 refs.

Contrary to the traditional school health programmes based on periodic physical examinations, a pilot project in Quebec, Canada, relied on information obtained throughout the year from parents, teachers, and the nurse/coordinator. Results were compared in an experimental group of 557 kindergarten children and a control group of 498 for whom the traditional programme was maintained. For problems of hearing, enuresis, learning, and behaviour, the number of cases detected was significantly greater in the experimental group. Each element of the programme is analyzed and the advantages of such an integrated approach are outlined. (Modified journal abstract.)

- 4832 Mphahlele, M.** *Fetal wastage and 'bad obstetric history' in a developing country.* South African Medical Journal (Capetown), 52(22), 19 Nov 1977, 891-892. Engl.

A prospective study of 82 patients in Botswana with "bad obstetric history" showed that 64 babies survived while 11 babies and 7 mothers died. It is difficult to pinpoint the causes of this foetal loss. Enough emphasis has been placed on bad obstetric history and, even in simple maternity wings lacking sophisticated monitoring equipment, commendable results can be obtained by a long stay in hospital to improve the general state of health. Statistical data are included. (Modified journal abstract.)

- 4833 Mueller, W.H., Titcomb, M.** *Genetic and environmental determinants of growth of school-aged children in a rural Colombian population.* Annals of Human Biology (London), 4(1), 1977, 1-15. Engl. Refs.

A survey was carried out among 403 families in Tensa, a village in rural Colombia, to determine the relative influence of heredity and environment on the growth and development of children. Height and weight measurements of both children and their parents were compared with those of upper and lower class families from Bogota.

In general, the Tensa children were closer to the lower class urban children. Parents were apparently affected by some form of chronic dietary imbalance that continues to affect their children. The methodology of the survey is discussed in detail and results presented in tabular form. (FM)

- 4834 Muller, A.S., Voorhoeve, A.M., Mannetje, W.'t., Schulpen, T.W.** *Impact of measles in a rural area of Kenya.* East African Medical Journal (Nairobi), 54(7), Jul 1977, 364-372. Engl. 11 refs.

From April 1974-March 1977, a measles surveillance programme of fortnightly home visits was carried out among a rural population of 24 000 in Kenya; during this time, two epidemics occurred. The median age of cases contracted during the epidemics was 32 months and approximately 80% of these children were aged less than 5 years and 17% aged less than 1 year. The case fatality rate was much higher during the 1st outbreak of measles (6.5%) than during the 2nd (1.7%). Nutritional status was better during the 2nd epidemic and the preceding nutritional status of those measles patients who died was poorer than that of those who survived. Statistical data are included. (Modified journal abstract.)

- 4835 Murray, M., Murray, P.K., McIntyre, W.I.** *Improved parasitological technique for the diagnosis of African trypanosomiasis.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(4), 1977, 325-326. Engl.

This diagnostic technique for trypanosomiasis increases the sensitivity and extends the scope of the Woo haematocrit method. A blood sample is centrifuged in a microhaematocrit tube and the tube cut 1 mm below the buffy coat and 3 mm above it. The plasma and cells are expelled onto a slide, a cover slip is added, and the wet film is examined microscopically, preferably with dark ground illumination. A table of the comparative value of various methods shows that of 100 cattle examined, 39 showed infection by the new technique, 26 by thick blood film, 15 by the Woo method, and only 8 by wet film. (Modified journal abstract.)

- 4836 Musalampasi.** *A propos de quelques cas suspects de fièvre jaune dans la zone de l'Ubangi (République du Zaïre). (Concerning several suspected cases of yellow fever in the Ubangi area, Republic of Zaïre).* Médecine d'Afrique Noire (Paris), 25(2), Feb 1978, 111-116. Fren.

Following the discovery of suspected cases of yellow fever in the Ubangi zone, Zaïre, a multidisciplinary team carried out epidemiological, virological, and entomological studies in the area. Household surveys revealed that the incidence of fever-carrying mosquitoes, the *Aedes aegypti*, was high enough to provoke a serious outbreak of the disease. The survey methodology is described and the results for each of the four localities visited are presented in tabular form. Statistical data are included. (FM)

- 4837 Mutatkar, R.K.** *Health education in leprosy; an evaluation.* Leprosy in India (New Delhi), 49(2), Apr 1977, 234-239. Engl.

Beginning in 1972, the Ghandi Memorial Leprosy Foundation established 10 health education centres in different parts of India. Specially trained paramedics delivered community lectures and organized refresher courses for medical professionals. The results of a questionnaire administered to selected health workers and members of the public in Poona, the site of one such centre, indicated that they were more knowledgeable and less prejudiced about leprosy than a comparable sample from Jalgaon, which has no centre. Nevertheless, although health education can change the attitudes and practices of people toward leprosy, the change is slow and the author recommends repeated contact with the public. Statistical data are included. (DP-E)

- 4838 Naeye, R.L., Tafari, N., Marboe, C.C., Judge, D.M.** *Causes of perinatal mortality in an African city.* Bulletin of the World Health Organization (Geneva), 55(1), 1977, 63-65. Engl.

Also published in French and Russian.

This study identifies the causes of death in a large-scale analysis of perinatal mortality in Addis Ababa, Ethiopia. A 72% autopsy rate was achieved when 1 019 postmortem examinations were performed for 1 424 consecutive perinatal deaths. The overall perinatal mortality rate was 65.3:1 000 live births. The ratio of stillbirths to neonatal deaths was 1.7:1, indicating that maternal factors were dominant in causing the deaths. One-third of the deaths were due to amniotic fluid infections, 15% to obstructed labour, 8% to *abruptio placentae*, and the rest to more than 20 other specific disorders. (Modified journal abstract.)

- 4839 Nasah, B.T., Drouin, P.** *Review of 70 cases of ruptured uterus in Cameroon.* Tropical Doctor (London), 8(3), Jul 1978, 127-131. Engl. 9 refs.

The results of a study of 70 cases of ruptured uterus occurring during delivery in the Cameroon from January 1975-December 1976 are presented. It was found that grand multiparous women and those aged 35 years or over composed the highest risk groups. Case histories of several patients show the need for early diagnosis and speedy intervention. The symptoms of high-risk pregnancy should be stressed in midwifery schools and health centres to improve the identification of such patients. Diligent supervision during labour, awareness of signs of early uterine rupture, and permanent sterilization, especially of multiparous women, to prevent recurrent ruptures, are also recommended. (FM)

- 4840 Ofosu-Amaah, S., Kratzer, J.H., Nicholas, D.D.** *Is poliomyelitis a serious problem in developing countries?—lameness in Ghanaian schools.* British Medical Journal (London), 1(6067), 16 Apr 1977, 1012-1014. Engl. 11 refs.

The authors maintain that the incidence of poliomyelitis in tropical countries is under-reported. They suggest that the observed increase in poliomyelitis associated with a fall in infant mortality could well be due to an increase in

reporting in countries where living standards have improved rather than to a real change in incidence. The evidence comes from a questionnaire sent to a sample of all schools in Ghana asking about lameness. The incidence was 7.8:1 000 schoolchildren and was slightly higher in rural areas. This could be due to greater use of vaccine in urban areas. Statistical data are included. (Modified journal abstract.)

- 4841 Payne, D., Grab, B., Fontaine, R.E., Hempel, J.H.** *Impact of control measures on malaria transmission and general mortality.* Bulletin of the World Health Organization (Geneva), 54(4), 1976, 369-377. Engl. 8 refs.

Also published in French and Russian.

A research project sponsored by WHO and carried out in Kenya from 1972-1976 evaluated the impact of fenitrothian spraying on malaria transmission. This study examines the effects of pest control efforts on the death rate of the population in general and on infant mortality in particular. The methodology used is described in detail. The daily parasitological inoculation rate was reduced from 0.00958 infective bites:individual before treatment to 0.00037 after treatment (a decrease of 96%). In 2 years, the general mortality declined from 23.9-13.4 deaths:1 000 population. Infant mortality decreased from 157-93 deaths:1 000 live births. Statistical data are included. (FM)

- 4842 Pradhan, S., Saxena, H., Pratap, V.K., Jain, P.C.** *Coprolological survey of parasitic infestation among patients attending O.P.D. and indoor of L.L.R. Hospital, Kanpur.* Indian Journal of Public Health (Calcutta, India), 21(1), Jan-Mar 1977, 23-28. Engl.

Stool samples from 12 350 persons in Kanpur, India, were examined for parasitic infestations from 1970-1974. Stools were positive in 28.1% of the people studied, most of whom had symptoms pertaining to the gastrointestinal tract. The findings indicate that parasitic infestation is endemic and increasing. Other studies are briefly reviewed. Statistical data are included. (DP-E)

- 4843 Putrali, J., Carney, W.P., Stafford, E.E., Tubo, S.** *Intestinal and blood parasites in the Banggai Kabupaten, central Sulawesi, Indonesia.* Southeast Asian Journal of Tropical Medicine and Public Health (Bangkok), 8(3), Sep 1977, 375-379. Engl. 9 refs.

See also entries 4738 and 4745.

A survey for blood and intestinal parasites carried out in central Sulawesi, Indonesia, examined 650 blood smears and 336 stool specimens from 182 males and 154 females ranging in age from 2-90 years. Hookworm, *Trichuris trichiura*, and *Ascaris lumbricoides* were the most common helminths encountered. *Schistosomiasis japonicum* was noticeably absent in the population sampled. The following intestinal protozoa were detected: *Entamoeba coli*, *E. histolytica*, *Iodamoeba butschlii*, *Giardia lamblia*, *Chilomastix mesnili*, and *Endolimax nana*. Malaria parasites were detected in 5% of the blood

smears examined and filariasis was found in 3%. (Modified journal abstract.)

- 4844 Raj, B., Ram, C.S.** *Epidemiological study of helminthic infestations in certain villages.* Medicine and Surgery (Baroda, India), 14(12), Dec 1974, 12-15. Engl. 8 refs.

An epidemiological study of the stool specimens of 722 Indian villagers revealed an overall parasitic infestation rate of 47.3%. *Ancylostoma* was present in 29.5%, ascariasis in 9.9%, *Enterobius vermicularis* in 3.3%, taenia in 3.0%, and *E. histolytica* in 1.5%. Males (55.1%) were infested more than females (40.1%). The infestation was heaviest in the poorer economic classes and in artisans and agricultural workers. Footwear habits influenced hookworm prevalence only. Morbidity caused by parasitic diseases is discussed and recent immunological advances are reviewed. Statistical data are included. (DP-E)

- 4845 Rajalakshmi, R., Ramakrishnan, C.V.** *Formulation and evaluation of meals based on locally available foods for young children.* In Bourne, G.H., ed., *Some Aspects of Human Nutrition*, Basel, Switzerland, S. Karger, 1977, 35-104. Engl. Refs.

Separate sections in this paper cover case histories of malnourished children, environmental factors influencing malnutrition, its pattern and prevalence in India, nutrients and food intake, nutrition in late childhood and adolescence, sprouting and fermentation, planning and evaluating meals for young children, feeding trials, and methodological and theoretical problems. Nutrition programmes that were tested and evaluated included: a one-dish meal for children based on cereal, pulses, and leafy vegetables; a take-home supplement of processed wheat and Benghal gram; a modified feeding programme based on cereals, legumes, and leafy vegetables; etc. Statistical data are included. (RMB)

- 4846 Rajan, V.S.** *Sexually transmitted diseases on a tropical island.* British Journal of Venereal Diseases (London), 54(3), Jun 1978, 141-143. Engl.

The epidemiology of venereal diseases in Singapore is examined. The 1977 prevalence of syphilis dropped 40% from that of 1976, although the rate of gonorrhea increased, mainly due to improved gynaecological techniques that facilitated diagnosis. The age groups principally affected were those aged 20-24 (30%) and 25-29 years (21%). Prostitutes were the greatest reservoirs of infection. Control aspects, including mass campaigns in 1976 and 1977, and treatment facilities are described. Medical students receive considerable instruction in the diagnosis and control of venereal diseases and the government of Singapore encourages international cooperation in control programmes. (DP-E)

- 4847 Rajasekaran, P., Dutt, P.R., Pisharoti, K.A.** *Impact of water supply on the incidence of diarrhoea and shigellosis among children in rural communities in Madurai.* Indian Journal of Medical

Research (New Delhi), 66(2), Aug 1977, 189-199. Engl. 30 refs.

In a 1972 Indian study, 1 091 children aged less than 5 years, living in 5 villages with wells and protected water supplied through street taps and taps within houses, were observed twice a week for 1 year for diarrhea and diarrhea stools were examined for shigella. Incidence of diarrhea was 21.51% in villages with a well, 36.7% in those using a street tap, and 23.52% in those using taps within houses; the corresponding rates for shigellosis were 9.76%, 12.52%, and 4.72%, respectively. In order to derive the full benefit of a protected water supply, personal hygiene appears as important as ready availability of adequate supplies of water. Statistical data are included. (Modified journal abstract.)

- 4848 Ramadasmurthy, V., Hanumantha Rao, D., Clarence, I.D., Balasubramanian, S.C.** *Nutrition education and SITE telecasts.* International Journal of Health Education (Geneva), 21(3), Jul-Sep 1978, 168-173. Engl. 8 refs.

An instructional television programme series on agricultural practices, animal husbandry, nutrition, health, and hygiene in a documentary format was launched in India in 1975. A follow-up study was conducted to assess the extent to which the content of the nutrition message in selected telecasts was retained by the target group, which was mainly rural women of child-bearing age. The very poor attendance at the telecasts was, at first, attributed to the inconvenient times of broadcast. However, a change in time failed to increase attendance and further research must be done to discover the real reasons why people did not attend. Improvements in the content of the programmes are suggested and recommendations are made for reinforcing their impact through interpersonal extension support. Statistical data are included. (FM)

- 4849 Rao, D.H., Naidu, A.N.** *Nutritional supplementation—whom does it benefit most?* American Journal of Clinical Nutrition (Bethesda, Md.), 30(10), Oct 1977, 1612-1616. Engl. 9 refs.

In a 14-month Hyderabad (India) nutrition programme, 306 children aged 1-5 years from five villages received a food supplement and 109 children from four other villages did not. The weights and heights of the groups from both villages were evaluated every 3 months. The results indicated that those children who were most malnourished (i.e., whose body weight was below 60% and height below 85% for age) received the most benefit in increased weight and height. Children previously classified as nutritional dwarfs also gained as much weight and height as normal children, which gave them a chance to move toward normalcy. Statistical data are included. (DP-E)

- 4850 Rao, K.V., Reddy, P.J., Marayanan, T.P.** *Comparison of arm and calf circumferences as indicators of protein-calorie malnutrition of early childhood.* Indian Journal of Nutrition and Dietetics (Coimbatore, India), 15(4), Apr 1978, 112-119. Engl. 24 refs.

A nutritional and anthropometric survey was conducted

of 3 100 preschool children in rural areas near Hyderabad, India, and of 100 children admitted to hospital with severe protein-calorie malnutrition. Data collected were used to assess the usefulness of arm and calf measurements as indicators of malnutrition. Arm circumference was associated with age and nutritional status, but not sex, while calf circumference did vary with sex. Though calf measurements were generally better indicators than the arm, neither is completely reliable as an independent measure of nutritional status, so their effectiveness remains limited. (FM)

- 4851 Rassi, E., Monzón, H., Castillo, M., Hernández, I., Ramírez Pérez, J.** *Discovery of a new onchocerciasis focus in Venezuela.* Bulletin of the Pan American Health Organization (Washington, D.C.), 11(1), 1977, 41-64. Engl. 22 refs.

In 1975, a number of Venezuelan surveys were conducted to detect cases of onchocerciasis in local Indian populations and collect entomological specimens for the purpose of identifying human-biting *Simuliidae* and determining indices of natural *O. volvulus* infestation in these species. The results of each survey are discussed and presented as statistical data. Epidemiological analysis of this Venezuelan Amazon focus suggests that it is unrelated to other traditional Venezuelan foci near the coast. At the same time, there are indications that the Amazon focus extends farther to the north and west into the headwaters of several Orinoco tributaries not included in this study. (DP-E)

- 4852 Ratcliffe, J.** *Social justice and the demographic transition: lessons from India's Kerala State.* International Journal of Health Services (Westport, Conn.), 8(1), 1978, 123-144. Engl. 51 refs.

Kerala is unique among Indian states in that it is the only one that has managed the demographic transition from high (39:1 000 in 1961) to low (26.5:1 000) birth rates as well as death rates. Other indices of Kerala's social development are equally surprising: literacy levels, life expectancy, and female education and age at marriage. However, these demographic trends are not the result of direct intervention designed to influence health and fertility but rather a response to structural reforms in its political economy. Statistical data are included. (Modified journal abstract.)

- 4853 Reddy, V., Bhaskaram, C., Raghuramulu, N.** *Immunological responses in malnourished children.* Indian Pediatrics (Calcutta, India), 14(4), Apr 1977, 255-258. Engl.

Immunological responses were studied in 160 preschool Indian children suffering from different grades of protein-calorie malnutrition (PCM). The cell-mediated immune response and antibody response to bacterial antigens were impaired in children with severe PCM, while the immunological responses were not altered in those with mild PCM, all of whom showed a normal reaction when immunized against smallpox. The findings indicate that even in poor under-nourished communities a great majority of the children would respond satisfactorily to active immunization procedures. Statistical data are included. (DP-E)

- 4854 Retel-Laurentin, A.** *Evaluation du rôle de certaines maladies dans l'infécondité; un exemple africain. (Evaluating the role of certain diseases in sterility; an African example).* Population (Paris), 33(1), Jan-Feb 1978, 101-119. Fren.

A medico-demographic survey of 284 women from a low-fertility ethnic group in Upper Volta was conducted to study the effect of disease on sterility, taking into account the duration of previous illness and treatment that might have modified its course. Ecological diseases, especially schistosomiasis, which can cause multiple miscarriages and sterility, raise the risk that pregnancy will be terminated by a miscarriage. However, if the miscarriage is followed by further births, the effect on total fertility is minimal. Untreated venereal diseases can also lead to a high fetal death rate and to low fertility, as many complications of pregnancy are followed by total sterility. Statistical data are included. (Modified journal abstract.)

- 4855 Richardson, B.D.** *Underweight, stunting and wasting in black and white South African schoolchildren: malnutrition or adaptation?* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(3), 1977, 210-216. Engl. Refs.

Weight and height data were collected on 4 887 black (about 50% rural) and 1 711 urban white schoolchildren in South Africa. Underweight results were most prevalent around puberty, but most subjects were no longer underweight at the age of 17 years despite the fact that there was no dietary intervention. Many underweight children had low absenteeism from school and were relatively strong. The findings indicate that weight must be considered in relation to height in assessing nutritional status and at-risk groups. Statistical data are included. (DP-E)

- 4856 Rizvi, S.N.** *Growth among Bhoksa boys of Nainital (U.P.).* Indian Journal of Pediatrics (Calcutta, India), 44(351), Apr 1977, 81-86. Engl.

Anthropometric measurements were made on 105 Bhoksa boys aged 7-13 years from the Nainital district of Uttar Pradesh, India. Eight different measurements were made and are presented as statistical data. The findings showed an increase with age in total lower and upper extremities, biacromial breadth, bicristal breadth, arm and calf girth, bitrochanteric breadth, and height vertex. They also indicated that the velocity of growth increased in successive ages up to age 13 years. Boys aged 13-14 years also showed accelerated growth. (DP-E)

- 4857 Rodrigues, O., Rodrigues, A.** *Evaluation of the role of pre-school clinics.* East African Medical Journal (Nairobi), 54(1), Jan 1977, 38-42. Engl. 10 refs.

Data obtained from the weight charts of 208 children attending two clinic sessions in rural Tanzania in 1974 did not show any demonstrable improvement in the

weight gain of the children due to clinic attendance or a vigorous nutrition education programme. It is therefore suggested that, in a situation of resource scarcity, the preschool clinic can be more effective in nutrition surveillance than nutrition education, which, at this time, could be more economically fostered by mass media techniques. Statistical data are included. (Modified journal abstract.)

- 4858 Russell, M.** *Relationship of family size and spacing to the growth of preschool Mayan children in Guatemala.* American Journal of Public Health (New York), 66(12), Dec 1976, 1165-1172. Engl.

The height of 643 preschool Mayan children from the highlands of Guatemala is analyzed from two previous longitudinal studies with respect to family size and spacing of siblings, controlling for parental heights and weights. The study methodology is described. Most previous studies have reported that height decreases as family size increases, but this study shows that Mayan children from both small and large families are relatively tall because their early-born siblings contribute to the family fortunes. The family planning implications of these findings are discussed. (RMB)

- 4859 Rwegellera, G.G., Mambwe, C.C.** *Diagnostic classification of first ever admissions to Chainama Hills Hospital, Lusaka, Zambia.* British Journal of Psychiatry (London), 130(6), 1977, 573-580. Engl. Refs.

In order to compare the frequency of certain mental illnesses in Western and African societies and contrast the results of this survey with those of previous surveys, 180 female patients admitted to Chainama Hills mental hospital, Lusaka, Zambia, from June 1974-May 1975 were studied. The results of their diagnoses were compared to those of a similar group admitted the previous year. In 1974-1975, 42% were given a diagnosis of depression, compared to 26% in 1975; 14% were diagnosed as schizophrenic, compared to 21% in 1973; and 3% were undiagnosed, compared to 27% in 1973. Despite their high incidence in the rest of Africa, the acute transient psychoses were rare in the two groups, although the prevalence of other psychiatric disturbances was similar to that in Western societies. (Modified journal abstract.)

- 4860 Saint-Yves, I.F.** *Malaria burden and population growth in the Solomon Islands.* Papua New Guinea Medical Journal (Port Moresby), 21(2), Jun 1978, 161-174. Engl. Refs.

This paper outlines the results of disease control activities, especially malaria campaigns, on the growth of population in the Solomon Islands, from 1931, the year of the 1st census, to 1976. The findings indicated that, although there has been and continues to be a population explosion, it is not significantly due to disease control. Statistical data are included. (DP-E)

- 4861 Sajogyo, P.** *Centres de réhabilitation nutritionnelle en Indonésie. (Nutrition rehabilitation centres in Indonesia).* Assignment Children (Geneva), 38, Apr-Jun 1977, 57-63. Fren.

In 1975, a pilot project in nutrition rehabilitation was begun in six villages of West Java, Indonesia. The project involved training village women (nutrition monitors) to conduct surveys, identify at-risk children, and provide nutrition education to mothers. The nutrition monitors organized workshops, held twice weekly over a 3-month period, during which they gave cooking demonstrations and distributed rice/soya food supplements. The results of this programme were positive in four villages: 80% of the children gained an average of 1.5 kg within 2 months and the mothers observed that their children had become more alert. Changes in food consumption and preparation habits, however, were less marked. (HC-L)

- 4862 Seaman, J., Holt, J., Rivers, J.** *Effect of drought on human nutrition in an Ethiopian province.* International Journal of Epidemiology (Oxford, UK), 7(1), Mar 1978, 31-40. Engl. 11 refs.

In 1974, a survey of Harerghe Province, Ethiopia, was conducted to verify reports of serious effects of drought 6 months earlier. Information was collected on nutritional status, mortality, livestock, and market prices from a random sample of 62 villages in four ecological zones: the highlands, the northern and southern rangelands, and an intermediate zone of mixed economy. The latter areas showed evidence of heavy human and livestock losses. Although a high prevalence of malnutrition was found in every area, the geographical and height distribution of malnutrition within population groups suggested that this could be clearly attributed to the effects of unusual food shortage only in one part of the southern rangelands. Statistical data are included. (Modified journal abstract.)

- 4863 Sevenhuysen, G.P.** *Analysis of selected aspects of applied nutrition fieldwork in Ethiopia relevant to developing countries.* London, London University, Apr 1976. 229p. Engl. Refs. Unpublished document; thesis presented to London University, Apr 1976.

Extensive fieldwork in applied nutrition was undertaken in the village of Debarek, Ethiopia, over more than 4 years. A nutrition education programme was drawn up using preliminary baseline survey findings and implemented during a 3-year period. A control community, which received no nutrition education, was observed during the same period for evaluation purposes. This document presents detailed accounts of the baseline and evaluation studies and of studies that were carried out during the latter part of the education campaign on the role of school nutrition education in applied nutrition field work, the improvement of poultry, the prevalence and treatment of goitre, and vitamin C status in the experimental village. Data from the studies are set forward in 54 tables and 14 figures. (HC-L)

4864 Shah, P.M. *Kasa model integrated mother-child-health-nutrition project, primary health centre, Kasa, Taluka Dahanu, district Thana, Maharashtra.* In *Alternative Approaches to Health Care*, New Delhi, Indian Council of Medical Research, 1976, 15-29. Engl. 15 refs.

Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

In 1974, the government-sponsored Kasa Project was initiated to deliver integrated health and nutrition services to mothers and children in 60 villages in the Kasa primary health centre area of India. These services, described in detail, were delivered by the health centre staff (1-2 physicians, 8 auxiliary nurse-midwives, a nursing supervisor, a sanitary inspector, and 4 smallpox vaccinators) with the help of 28 locally-recruited women trained as village health workers (VHWs). The selection, training, and job description of VHWs are discussed. The resources, personnel, and problems of the health centre are also considered. An evaluation of the services revealed that 62.95% of the project's malnourished children improved their weight by 10% more than expected growth, smallpox immunization coverage increased from 52.3%-94.2% and BCG coverage from 0.2%-54.0%, etc. (RMB)

4865 Sharma, D.B., Lahori, U.C. *Feeding patterns of infants and pre-school children in the urban and rural areas of Jammu (Kashmir).* *Indian Pediatrics* (Calcutta, India), 14(4), Apr 1977, 247-254. Engl. 13 refs.

A survey of the feeding habits of 1 200 urban and 1 000 rural infants and preschool children was conducted in Kashmir, India, from December 1974-December 1975. Topics examined include breast-feeding, supplementary feeding, the introduction of solids, and weaning. The relationship between socioeconomic status and feeding practices is considered. Ideas on nutrition education, including a suggestion that courses on the subject be made compulsory in high schools and colleges, are offered. Statistical data are included. (DP-E)

4866 Shuenyane, E., Mashigo, S., Eyberg, C., Richardson, B.D., Buchanan, N. *Socio-economic, health and cultural survey in Soweto.* *South African Medical Journal* (Capetown), 51(15), 9 Apr 1977, 495-500. Engl.

The socioeconomic, health, and nutritional status of the families in Diepkloof, Soweto, South Africa, was studied. The results, detailed in the text, revealed numerous socioeconomic ills, of which the most important is the observation that 30% of the families existed below the poverty datum line, even when there was more than one wage-earner. More emphasis on health education and the promotion by health personnel of a better understanding of the backgrounds of the clinic and hospital patients are urgent priorities for health services. Statistical data are included. (Modified journal abstract.)

4867 Singh, P., Tomaszunas, S., White, E. *Smallpox eradication in Rajasthan, India.* *Acta Tropica* (Basel, Switzerland), 34(3), 1977, 257-264. Engl. 9 refs.

Between 1962, when the smallpox eradication programme was first launched in India, and 1971, the annual number of reported cases in Rajasthan rose from 3 909-4 821. However, changes in the vaccination technique, the use of a new and more potent vaccine, and improved surveillance brought good results. By 1972, only 2 970 cases were reported and in 1974 there were only 10 new breakouts, all originating from imported cases. The organization and progress of the eradication campaign and the history of smallpox eradication in Rajasthan are described. (DP-E)

4868 Sinha, D.P. *Measles and malnutrition in a West Bengal village.* *Tropical and Geographical Medicine* (Haarlem, Netherlands), 29(2), 1977, 125-134. Engl. 8 refs.

The occurrence of measles was observed over a 5-year period (1970-1974) in a West Bengal (India) village. Measles occurred every year between May and August, mostly in children aged less than 7 years, and remained confined within play groups, which were related to caste. The incidence of measles was significantly lower in severely malnourished children than well nourished children. The disease was not very severe and of 121 cases only 2 children, both of whom had had kwashiorkor, died. The author suggests that marasmus, the type of malnutrition prevalent in India, increases a child's resistance to measles, whereas kwashiorkor, the type most common to Africa, increases his or her susceptibility. Statistical data are included. (Modified journal abstract.)

4869 Slooff, R., Schulpen, T.W. *Machakos Project studies: agents affecting health of mother and child in a rural area of Kenya; VI: the social and hygienic environment.* *Tropical and Geographical Medicine* (Haarlem, Netherlands), 30(2), Jun 1978, 257-275. Engl. Refs.

As part of an investigation into determinants of health and disease in children aged less than 5 years, a household survey of social and hygienic conditions was carried out in the Machakos Project area, Kenya. This paper deals with the field methodology of the survey, the selection of variables from the material collected, and the differences between the eastern and western parts of the area in respect to the variables selected. Statistical data are included. An appendix lists the social and hygienic variables measured for each child after the results of a random sampling of 50 questionnaires were screened. (Modified journal abstract.)

4870 Smith, A., Hansford, C.F., Thomson, J.F. *Malaria along the southernmost fringe of its distribution in Africa: epidemiology and control.* *Bulletin of the World Health Organization* (Geneva), 55(1), 1977, 95-103. Engl. 10 refs.

Also published in French and Russian.

From October 1973-September 1976, the operational

and epidemiological factors involved in the residual transmission of malaria were studied in over 17 000 people in an area of northern Transvaal (South Africa). Incidence surveys based on the screening of fever cases revealed 42 cases of autochthonous malaria in 1974-1975 and 10 cases in 1975-1976. Parasite prevalence surveys were not sensitive enough to assess the malaria situation and serological testing indicated different levels of infection according to the method used. The normal malaria vectors were not common to the area, but transmission might be attributed to a recently discovered species of mosquito that feeds on humans. Statistical data are included. (RMB)

- 4871 Spalding, E., McCrea, J., Rutishauser, I.H., Parkin, J.M.** *Study of severely malnourished children in the Gambia.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 23(5), Oct 1977, 215-219. Engl.

A study was made of 168 severely malnourished children aged less than 5 years who were admitted to the Medical Research Council Ward in Fajara, Gambia, from September 1974-November 1975. There was 23% mortality among the children, with most deaths occurring during the 1st 3 days after admission. Severe dehydration on admission was a major factor in the high death rate. Most of the children were suffering from marasmus, the predominate form of malnutrition in this area. A very satisfactory rate of weight gain occurred among the survivors who were given a high energy diet and special milk. Findings indicated that inadequate breast-milk production is an important factor in malnutrition. (FM)

- 4872 Srinivasa, D.K., Pankajam, R., Narayana Rao, M.V.** *Evaluation of maternal and child health services.* Indian Journal of Medical Research (New Delhi), 65(6), Jun 1977, 845-852. Engl. 11 refs.

An evaluation was conducted of the quality of maternal care provided by the Jawaharlal Institute Urban Health Centre, India. From January 1968-January 1974, a total of 145 multiparous women were monitored to assess changing trends in quality and utilization of the services from one pregnancy to the next. In subsequent pregnancies there was significant improvement in early registration for antenatal care, frequency of visits to the clinic, and antenatal tetanus toxoid immunization. Acceptance of family planning was also higher. The usefulness of this method of evaluation by studying utilization trends is also discussed. (FM)

- 4873 Steven, C.** *Food aid and nutrition: the case of Botswana.* Food Policy (Guildford, UK), 3(1), Feb 1978, 18-28. Engl. 54 refs.

Nutrition programmes in Botswana financed by World Food Programme (WFP) food aid grants are evaluated. Emphasis is on the primary school feeding programme and the vulnerable group feeding programme that provides food supplements to pregnant women, nursing mothers, preschool children, and tuberculosis outpatients. The impact of these projects on the family economy and on the national budget is considered. The author

concludes that the feeding programmes succeed in reaching a large number of poor people, though not always the poorest. While they are a good example of short-term, specific aid, they fail to consider long-term nutritional objectives. (FM)

- 4874 Stewien, K.E., Barbosa, V.** *Análise da situação da poliomielite em uma amostra de crianças da cidade de São Paulo, com o auxílio de um parâmetro de vigilância epidemiológica. (Analysis of the poliomyelitis situation in Sao Paulo by means of an epidemiologic surveillance parameter).* Revista de Saúde Pública (São Paulo, Brazil), 11(3), 1977, 338-344. Portuguese.

The epidemiology of poliomyelitis in Sao Paulo, Brazil, is analyzed. A recent survey revealed that 50%-60% of the children aged 0-10 years had been immunized by oral poliomyelitis vaccine. The average rates of effective contacts between individuals of the entire population and types 1 and 2 polioviruses were annually 85 and 70:1 000 inhabitants. Because of the relatively high mortality from poliomyelitis among children in the earliest years of life (31:100 000), the need for infants to receive the oral vaccine during the 1st 2-3 months is emphasized. Statistical data are included. (Modified journal abstract.)

- 4875 Su'dan, R.H.** *Tuberculosis control in Pertamina Unit 1 (North Sumatra); some aspects and achievements during the year 1975.* Jakarta, University of Indonesia, Aug 1976. 79p. Engl.

Thesis presented to the University of Indonesia for the Academic Post Graduate Brevet in Public Health and Preventive Medicine, August 1976.

In Indonesia, there is a direct connection between tuberculosis and living conditions, socioeconomic status, and other environmental factors. Disease control campaigns are inhibited by the lack of facilities and the low salaries of medical personnel. The author describes one such campaign among the workers of an Indonesian oil company. Separate sections of his thesis deal with BCG vaccinations, casefinding, treatment, follow-up, education, evaluation, recording, and reporting. Demographic data are also included. A summary is presented in both English and Indonesian. (DP-E)

- 4876 Sung, K.T.** *Family planning education as an integral part of day care services in Korea.* Studies in Family Planning (New York), 9(4), Apr 1978, 71-74. Engl.

To improve family planning and nutrition in low-income Korean families, the Integrated Day Care Program (IDCP) was initiated at some 300 government-sponsored day care centres in 1973; in 1975 it served 30 000 children and 14 700 mothers at a cost of US\$996 446.00. Services included one free meal and snacks for each child 6 days a week, monthly classes in family planning and nutrition, and free contraceptives when available. An evaluation based on questionnaires administered to 1 029 IDCP mothers and 459 mothers attending other day care centres revealed that the former demonstrated a greater knowledge of and more positive

attitudes towards contraception and 75%, as compared to 55%, practiced it regularly. (RMB)

- 4877** Tay, J., Salazar-Schettino, P.M., de Haro Arteaga, I., Bucio Torres, M.I. *Frecuencia de las helmintiasis intestinales en México. (Frequency of intestinal helminthiasis in Mexico)*. Revista de Investigación en Salud Pública (Mexico City), 36(4), 1976, 241-280. Span. 39 refs.

In this document the authors have collected the results, mainly in tabular form, of the epidemiological surveys of the frequency of selected intestinal parasites carried out in Mexico during the last 20 years. Survey information includes year of publication, author, locale, demographic data and size of the sample, diagnostic methods employed, and frequency of infection. Diseases covered include ascariasis, trichuriasis, uncinariasis, strongyloidiasis, enterobiasis, hymenolepiasis, taeniasis, diphylobotriasis, and trichostrongyliasis. (RMB)

- 4878** Thomas, M., Anand, N.K., Gupta, S. *Evaluation of different regimes of management in malnourished children*. Indian Pediatrics (Calcutta, India), 14(9), Sep 1977, 725-730. Engl. 23 refs.

Three groups of 20 children with protein-calorie malnutrition were fed a daily diet of 200 calories/kg of weight with the addition of 2 gm, 4 gm, and 6 gm of protein, respectively. The protein was obtained mainly from skimmed milk and eggs with some dahl, rice, and wheat. Anthropometric measurements were taken on the 10th and 21st days. The results showed that, although there was a significantly lower weight gain among the children receiving 2 gm of protein with 200 calories/kg:d, the other two diets were equally effective in the treatment of malnutrition with no specific benefit deriving from the greater amount of protein. Statistical data are included. (DP-E)

- 4879** Toro, O., de Pablo, S., Aguayo, M., Gattán, V., Contreras, I. *Prevention of vitamin A deficiency by fortification of sugar; a field study*. Archivos Latinoamericanos de Nutrición (Caracas), 27(2), 1977, 169-179. Engl. 14 refs.

In order to evaluate the effectiveness of a sugar fortification programme, vitamin A fortified sugar was distributed to four Indian villages in the mountainous region of Arica, Chile, whose inhabitants showed a severe vitamin A deficiency. The results of this study demonstrated that the sugar fortification programme was able to correct vitamin A deficiency by elevating the vitamin A intake and consequently improving the circulating retinol without substantially increasing the cost or modifying the organoleptic characteristics of sugar. Statistical data are included. (Modified journal abstract.)

- 4880** Turner, D.A. *Review of the malaria eradication programme in the Solomon Islands 1975-1976*. Papua New Guinea Medical Journal (Port Moresby), 20(4), Dec 1977, 188-197. Engl.

An evaluation of the Solomon Islands malaria eradication programme from 1975-1976 describes the present state of the programme, outlines the problem areas that

remain, and indicates future prospects. While progress is satisfactory in most regions, malaria is still prevalent in north Guadalcanal and the risk remains of malaria being reintroduced into areas where it has already been eradicated. Spraying operations, surveillance activities, community diagnosis, and treatment methods used in the programme are described. Supplemental measures being taken in north Guadalcanal to reduce vector density include larviciding, source reduction, ULV (ultra low volume) spraying, and biological control with larvivorous fish. (FM)

- 4881** Vacca, A., Bird, G.C. *Maternal mortality in Papua New Guinea 1973-1975*. Papua New Guinea Medical Journal (Port Moresby), 20(4), Dec 1977, 180-186. Engl.

The results of an analysis of 322 maternal deaths reported in Papua New Guinea from January 1, 1973-December 31, 1975 are presented. The most common cause of death in these cases was postpartum haemorrhage, which accounted for 121 deaths, followed by puerperal sepsis, associated medical or surgical conditions, prolonged or obstructed labour, ruptured uterus, abortion, antepartum haemorrhage, and eclampsia. It is felt that 80% of these deaths could have been prevented through better use of existing antenatal services by the mothers and early recognition and referral of high-risk women. (FM)

- 4882** Vaughan, J.P., Menu, J.P., Kihama, F., Brooke, D., Kiwia, A. *Anaemia treatment trials in a rural population of Tanzania*. Tropical and Geographical Medicine (Haarlem, Netherlands), 29(4), Dec 1977, 369-373. Engl. 9 refs.

In a coastal Tanzanian population in whom anaemia was common, two randomized controlled trials were undertaken to investigate the effectiveness of treating iron deficiency anaemia at a dispensary and at primary schools. For anaemic adult villagers treated at a dispensary, one dose of tetrachlorethylene (TCE) for hookworm infection and a once per week visit to collect medicines were found to be satisfactory. In children aged 5-14 years, no significant rise in haemoglobin was obtained using oral iron and/or TCE, either at the dispensary or at primary schools. This suggests that malaria was a more potent cause of anaemia in these children. (Modified journal abstract.)

- 4883** Venkataswamy, G. *Child care centres in one hundred and forty six villages*. In Alternative Approaches to Health Care, New Delhi, Indian Council of Medical Research, 1976, 47-63. Engl. Symposium on Alternative Approaches to Health Care, Hyderabad, India, 27-30 Oct 1976.

For complete document see entry 4254.

In 1971, the Erskine Hospital in New Delhi (India) established a nutrition rehabilitation centre in order to develop an inexpensive nutritious diet to cure malnutrition and nutrition-related eye diseases, obtain baseline data for establishing similar nutrition centres in villages, and create a training institution for health workers and auxiliaries. Projects were begun in 146 villages in 1972.

Information is provided on the health and nutrition status of the target population, demonstration feedings, treatment of common illnesses, immunization, nutrition and health education for mothers, self-help groups, training of interns and village health workers, family planning services, resources and finances, etc. Various facets of the programme are evaluated. Statistical data are included. (RMB)

- 4884 Walker, A.R., Walker, B.F.** *Studies on increases in growth rate of South African black schoolchildren and their significance to health.* South African Medical Journal (Capetown), 51(20), 14 May 1977, 707-712. Engl. 29 refs.

Heights and weights of black schoolchildren aged 8-14 years at five rural and two urban centres in the Transvaal, South Africa, have been compared with data secured at the same locations 12-38 years ago. Significant increases have occurred, although heights and weights in general remain lower than international reference standards. Generally, the pupils have normal weight for height. Evidence suggests that black schoolchildren experience a high level of everyday good health, but this must be validated. Research is required to determine the precise degree of morbidity and mortality prevailing in slower compared with faster growing pupils. (Modified journal abstract.)

- 4885 Walker, A.R.** *Health handicap of schistosomiasis to children in Southern Africa.* South African Medical Journal (Capetown), 51(16), 16 Apr 1977, 541-544. Engl. 34 refs.

Comparisons were made between black and white South African children to evaluate the health handicap caused by schistosomiasis. In general, infected black children were only slightly disadvantaged, while infected white children were significantly impaired. Similar results were found with adults. More research is needed on morbidity and mortality related to schistosomiasis, particularly among the adult population, and on the extent to which the disease is a public health burden. (DP-E)

- 4886 Wang, V.L., Ephross, P.H., Green, L.W.** *Point of diminishing returns in nutrition education through home visits by aides: an evaluation of EFNEP.* Health Education Monographs (San Francisco, Cal.), 3(1), Spring 1975, 70-88. Engl. 9 refs.

From 1970-1972, nutrition aides in a Maryland (USA) nutrition education programme taught menu-planning, cooking, comparative shopping, etc., to poor rural women. The results of successive annual interviews with 93 of the women and 58 of their designated friends suggest that there is a point of diminishing returns beyond which the behavioural and attitudinal changes brought about by the programme are too small to justify continued home visits. To sustain cost-effective visits after the 1st year, more emphasis must be placed on reinforcing 1st-year gains and on expanding the scope of nutrition education to include more health education of other kinds. (Modified journal abstract.)

- 4887 Weiland, H.T., Williams, M.C., Hull, B.** *Serologic survey of dengue and other arboviruses in Curacao and Aruba, 1973.* Bulletin of the Pan American Health Organization (Washington, D.C.), 12(2), 1978, 134-142. Engl. 12 refs. Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*.

A total of 3 044 sera collected from children aged 4-12 years on the Caribbean islands of Aruba and Curacao were tested for antibodies to various arboviruses. The tests indicated that dengue 2 was endemic on Curacao but not on Aruba, where there were more effective vector control measures. Neutralization tests performed with a small number of sera suggest that dengue infections may have afforded some level of protection against yellow fever to a portion of the Curacao population. Statistical data are included. (Modified journal abstract.)

- 4888 Westcott, G.M., Stott, R.A.** *Extent and causes of malnutrition in children in the Tsolo district of Transkei.* South African Medical Journal (Capetown), 52(24), 3 Dec 1977, 963-968. Engl. 8 refs.

An anthropometric survey of 193 children aged less than 5 years in a rural Transkei village revealed that 36% of the children were below the Boston 3rd percentile (BTP), including 57% of those between the ages of 18 and 32 months, and that nearly 30% die before the age of 2 years. Low income and lack of sound dietary knowledge were the main factors accounting for the high incidence of undernutrition. The author suggests that economic opportunities for men would ensure that a higher proportion of their income is made available to their families. Statistical data are included. (FM)

- 4889 Westwater, K.** *Study of the relative caries prevalence in first and second permanent molars of rural Zambian schoolchildren.* Journal of Dentistry (Bristol, UK), 5(1), 1977, 42-46. Engl.

A former dental officer with the flying doctor service in Zambia notes that clinical observations of rural schoolchildren with no previous dental experience showed an apparent difference in cavity susceptibility between the 1st and 2nd permanent molars. A study of one group of 377 children aged 11-13 years and another of 220 children aged 14-16 years showed this difference to be statistically significant and geographically constant despite dietary differences. The author thinks that the children's nutritional status during the years of calcification could be a causative factor in the increased caries susceptibility of their 2nd permanent molars. Statistical data are included. (Modified journal abstract.)

- 4890 Whitehead, R.G.** *Infection and the development of kwashiorkor and marasmus in Africa.* American Journal of Clinical Nutrition (Bethesda, Md.), 30(8), Aug 1977, 1281-1284. Engl. See also entry 4891.

The author has attempted to discover why some African children suffering from malnutrition develop kwashiorkor, whereas others develop marasmus. Height and weight measurements were taken monthly and the period between measurements was searched for bouts of

illness. Diet, with its seasonal variations, was closely monitored. The findings indicate that infection, particularly gastroenteritis and malaria, can have a profound effect on the development of both faltering growth and hypoalbuminemia. Statistical data are included. (DP-E)

- 4891 Whitehead, R.G., Coward, W.A., Lunn, P.G., Rutishauser, I.** *Comparison of the pathogenesis of protein-energy malnutrition in Uganda and the Gambia.* Transactions of the Royal Society of Tropical Medicine and Hygiene (London), 71(3), 1977, 189-195. Engl. Refs.
See also entry 4890.

The pattern of growth, biochemical and endocrine development, dietary intake, and disease patterns of rural children in Uganda and the Gambia were monitored during the 1st 3 years of life to determine why kwashiorkor is predominant in Uganda and marasmus in the Gambia. The evidence indicates that the hormonal balance, particularly cortisol and insulin status, can have a profound influence on which organs of the body are preferentially affected by malnutrition and hence on the type of protein-energy malnutrition that is likely to emerge. There were also, however, important differences in protein and energy intake between the two countries. Statistical data are included. (Modified journal abstract.)

- 4892 WHO, Geneva.** *Smallpox surveillance/Surveillance de la variole.* Weekly Epidemiology Record (Geneva), 53(2), 13 Jan 1978, 9-15. Engl., Fren.
See also entry 4409.

As of January 10, 1978, WHO had recorded zero smallpox incidence worldwide since the last known case was reported in Somalia on October 16, 1977. For over 2 years, smallpox cases have been detected in only two other countries bordering on Somalia: Kenya, where five cases were reported in February 1977 following an importation from Somalia, and Ethiopia, whose last case occurred in August 1976. Special attention must be paid to smallpox surveillance in Saudi Arabia and Yemen, whose inhabitants may contract the disease on pilgrimages to Mecca, and in laboratories. It is concluded that the incidence of monkeypox does not indicate an animal reservoir of smallpox. (RMB)

- 4893 WHO, Geneva.** *Expanded programme on immunization/Programme élargi de vaccination.* Weekly Epidemiology Record (Geneva), 53(3), 20 Jan 1978, 21-22. Engl., Fren.

In 1976, 48.3% of Sri Lankan children aged less than 1 year received 1 dose of poliomyelitis vaccine, 38.2% received 2 doses, and 26.0% received 3 doses. For diphtheria, tetanus, and whooping cough vaccine, the figures for 1, 2, and 3 doses were 56.3%, 43.9%, and 31.8% respectively. These figures show a considerable increase in coverage since 1975. Also in 1976, BCG vaccine was given to 244 299 children aged less than 1 year (68.3% of the age group) and the total number of doses of tetanus vaccine given to pregnant women increased from

94 434-284 747, approximately 25% coverage. (Modified journal abstract.)

- 4894 WHO, Geneva.** *Synopsis of the world malaria situation in 1976/Sommaire de la situation du paludisme dans le monde en 1976.* Weekly Epidemiological Record (Geneva), 52(41,42,43,44,45,46), 14,21,18 Oct 1977, 4,11,18 Nov 1977, 325-327, 333-339, 341-347, 349-353, 359-362, 366-370. Engl.

This series of articles on the global malaria situation in 1976 presents detailed information on those countries that are free of malaria and those that are more or less successfully instituting control measures. Statistical data are provided on population, endemicity, control measures, pest control, eradication programmes, and mortality. Induced and imported cases of malaria by country of origin and by species of *Plasmodium* are examined. (RMB)

- 4895 WHO, Geneva.** *Yellow fever in 1976/Fièvre jaune en 1976.* Weekly Epidemiological Record (Geneva), 52(39), 30 Sep 1977, 309-311. Engl., Fren.

Only 68 cases of yellow fever and 35 deaths were reported in Africa and South America in 1976, compared with 301 cases and 135 deaths in 1975. Sixty-seven of these cases occurred in South America; 46 in Colombia (21 deaths), 18 in Bolivia (11 deaths), and 1 each in Brazil, Ecuador, and Peru (all fatal). The 46 Colombian cases represent the highest figure in 28 years, most of them occurring among unvaccinated workers in the northeast where the jungle is being cleared. The single African case occurred in Cameroon, but it is emphasized that this does not mean that yellow fever has not ceased to be a potential danger and the results of recent serological studies in Africa are reviewed. (Modified journal abstract.)

- 4896 WHO, Geneva.** *Surveillance of rabies in the Americas/Surveillance de la rage dans les Amériques.* Weekly Epidemiology Record (Geneva), 52(33), 19 Aug 1977, 273-274. Engl., Fren.

This resume, abstracted from the annual summary of the Pan American Zoonoses Center rabies survey of the Americas, shows that, of approximately 21 000 cases reported in 1976, 183 occurred in humans. Vigorously-applied canine vaccination programmes have substantially reduced the human disease in Brazil and Colombia; many Caribbean islands and parts of Argentina and Chile are rabies-free. Severe outbreaks due to inadequate control measures occurred in Buenos Aires, Honduras, Peru, and Mexico. (Modified journal abstract.)

- 4897 Wilton, D.P., Cedillos, R.A.** *Domestic triatomines (reduviidae) and insect trypanosome infections in El Salvador.* C.A. Bulletin of the Pan American Health Organization (Washington, D.C.), 12(2), 1978, 116-123. Engl. 9 refs.
Also published in Spanish in *Boletín de la Oficina Sanitaria Panamericana*.

A random sample of 10% of the houses in 25 Salvadorean

communities was surveyed to learn more about the distribution of Chagas' disease vectors and trypanosome parasites in that country. The results indicate that factors such as variations in housing construction, insecticide application, geographic elevation, and the vector species involved have a critical effect on transmission of the disease agent. Statistical data are included. (Modified journal abstract.)

- 4898 Woolfe, J.A., Wheeler, E.F., van Dyke, W., Orraca-Tetteh, R.** *Value of the Ghanaian traditional diet in relation to the energy needs of young children.* Ecology of Food and Nutrition (London), 6(3), 1977, 175-181. Engl. 10 refs.

The energy intake at individual meals and the energy densities of traditional foods consumed by Ghanaian children aged 1-3 years were studied at a village and an orphanage. In both locations, a wide range of food intakes and food energy densities was found and there were children who consumed more than the FAO estimated energy requirement of 1220 KJ (28 KCals):kg at single meals. The maximum weight of food consumed at a meal was around 40 g:kg. It is concluded that the traditional Ghanaian diet can adequately satisfy a healthy child's energy needs without the addition of milk and other Western foods. Statistical data are included. (Modified journal abstract.)

- 4899 Wyatt, J.L., Wyatt, G.B.** *Study of the feeding habits and nutrition of children in the Anguganak*

area of West Sepik. Papua New Guinea Medical Journal (Port Moresby), 21(2), Jun 1978, 183-190. Engl. 23 refs.

From November-December 1976, parents of 255 children aged 5 years or younger in West Sepik, Papua New Guinea, were questioned about the food the children received. A comparison with previous surveys in the area showed that the mean weights of these children did not differ significantly from those of children weighed in a 1967 study. The author concludes that health education should be supplemented by high density weaning foods and disease control efforts to overcome the prevalence of malnutrition. Statistical data are included. (DP-E)

- 4900 Wynn, A.** *Health care systems for pre-school children.* Proceedings of the Royal Society of Medicine (London), 69(5), May 1976, 340-343. Engl. Refs.

The character of a country's health care system is the major determinant of its postneonatal mortality rate. Rates tend to be low in countries where parents are taught, usually in the prenatal period, to recognize childhood illnesses. Another way to lower mortality is to screen children for signs of illness. The author compares screening attempts in England, France, Sweden, and Finland, noting the results, problems, and cost effectiveness of the programmes. He suggests that preventive health services be established by legislation, that the service aim to reach all children, and that parent education be part of the programme. (DP-E)

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