



**Regional Office for the Western Pacific
Bureau régional du Pacifique occidental**

REGIONAL COMMITTEE

**Fortieth session
Manila
19-25 September 1989**

Provisional agenda item 12

WPR/RC40/8 Rev. 1

16 September 1989

ORIGINAL: ENGLISH

DEVELOPMENT OF HEALTH RESEARCH¹

This document summarizes the major activities of the Regional Research Promotion and Development Programme. It outlines some of the activities of the special programmes conducted in the Region by WHO Headquarters, as well as various research activities conducted within the framework of WHO technical cooperation programmes. It also presents the recommendations made by the Western Pacific Advisory Committee on Health Research (WPACHR) at its twelfth session in April 1988.

¹This document has been revised to include the full recommendations of the Western Pacific Advisory Committee on Health Research at its twelfth session in April 1988.

1. INTRODUCTION

WHO's involvement in health research stems from article 2 (n) of its Constitution, which calls on the Organization "to promote and conduct research in the field of health". The recent reorientation of the WHO research programme has ensured substantial participation by regions and countries. WHO's policy has been to support the building up of national research capabilities, particularly in developing Member States. It has also intensified its efforts to promote effective and efficient systems for health research management, including information support for research. The emphasis is on problem-solving oriented research rather than on basic or fundamental research.

WHO's research programmes generally have two interrelated purposes: to obtain results that are relevant and applicable, and to strengthen the research capacity of the countries themselves. These two purposes are evident in the work of large research programmes such as special programmes on tropical disease research, human reproduction research and diarrhoeal disease research, but to one degree or another, they underlie all the research programmes of WHO.

2. MAJOR ACTIVITIES PERFORMED BY THE REGIONAL RESEARCH PROMOTION AND DEVELOPMENT PROGRAMME

2.1 National health research management mechanisms

Member States have been encouraged by the Regional Committee and by working group meetings of directors of health research councils and analogous bodies to develop adequate mechanisms for coordinating their research work. These should link research priorities to the solution of major health or health-related problems. National health research councils have been established in Australia, New Zealand and the Philippines, and functional medical research committees exist in Malaysia, Papua New Guinea and Singapore.

At its twelfth session in April 1988, the Western Pacific Advisory Committee on Health Research (WPACHR) recommended the visit of a task force to some countries in the Region to discuss with the appropriate national organizations the possible establishment of a national health research council and the collaboration of such a council with similar bodies in other Member States of the Region. Visits to China and Viet Nam took place in February and March 1989.

The document "International cooperation in health research and technology transfer through national health research councils or analogous bodies" was circulated widely to Member States for comments. Generally, there was strong support for the proposals of the document, although questions of timing and funding were seen as difficult to resolve. There was almost unanimous agreement with the general principle of collaboration in a wide variety of fields, particularly the sharing of information on a regular basis. There was less agreement on the need for a newsletter, and the establishment of a secretariat for research coordination in the Region seemed unnecessary, as WHO already played this role. The need for training in research administration was generally supported, but the problems of funding were noted.

Another document, "Health research strategy for health for all by the year 2000: revised report of the global ACHR Sub-Committee", along with the comments of a report made by a

small group of WPACHR members, was also circulated for comment. The majority supported the general strategy and the basic concept of basing it on a classification of disease origins. Others felt that the report did not sufficiently stress promotion of health as distinct from disease prevention or control, a view supported by the WPACHR Sub-Committee. A very small minority expressed the view that such a report, conceptual in nature, would be of little value to a developing country faced with the need to develop a practical programme of health implementation. There was general agreement among the WPACHR members that this report should be used as one among many approaches to the revision of national health strategies, and that it might provide a fresh perspective.

The WPACHR in 1988 reviewed the research priorities of the Region and considered that the existing list was still valid. It included health systems research, disease vector control, schistosomiasis and other parasitic diseases, diarrhoeal diseases control, health behaviour and mental health, viral hepatitis and respiratory infections.

2.2 National focal point for technology transfer

The Regional Committee in 1987 adopted a resolution requesting the Member States to identify national focal points for the promotion of technology transfer. Sixteen countries and areas have responded positively.

2.3 Strengthening of national research capability

Research manpower development through short courses on research methodology, technical cooperation in the design of research protocols and the award of training grants was stressed, as a means of strengthening of national research capabilities. National workshops on research design and methodology were held in Viet Nam (1987) and Papua New Guinea (1988). A national workshop on medical research management was held in China (1987). A total of 15 research training and visiting scientist grants were awarded during this biennium.

Continued progress was made by the WHO Regional Centre for Research and Training in Tropical Diseases and Nutrition, situated at the Institute for Medical Research, Kuala Lumpur, Malaysia. Its primary objective of strengthening research capability has been achieved in the areas of epidemiology, biostatistics, biocomputation, immunology, malaria, filariasis, medical entomology and the exchange of biomedical research information. A number of meetings, workshops and training courses within the Region on research methods have been conducted by the staff of the Centre.

2.4 Support for research projects from the Western Pacific Regional Office

Ninety-six research proposals were funded in 1987 and 1988 (see Annex 1). Countries have been encouraged to perform multidisciplinary problem-solving research.

2.5 Collaborating centres in the Western Pacific Region

The number of collaborating centres which have been designated within the Region has increased to 171 (see Annex 2).

In 1988, a national meeting for directors of all WHO collaborating centres in the People's Republic of China was held in Shanghai. The main emphasis was on how to produce clear information on the centres' activities.

3. ACTIVITIES CARRIED OUT BY HEADQUARTERS' SPECIAL PROGRAMMES IN THE REGION

3.1 Special Programme of Research, Development and Research Training in Human Reproduction (HRP)

The activities of this Special Programme in the Region may be categorized as follows:

- research in human reproduction;
- institution strengthening and providing resources for research.

During the last two years, the Special Programme provided a sum of US\$2 586 547 to support research projects in the Region. The majority of the current studies are related to the safety and efficacy of current contraceptive methods and the development of new birth control technology. Financial support was also given to studies related to psychosocial factors affecting family planning acceptance, epidemiology of infertility, and health service aspects of family planning.

Many of the programme's activities in the Region are aimed at strengthening research capability in family planning by providing support to institutions for the purchase of equipment and supplies, and collaborating in developing expertise and planning research. The Special Programme provided support to six institutions in the Region for institution strengthening.

3.2 Special Programme for Research and Training in Tropical Diseases (TDR)

During 1987 and 1988, 109 projects in the Region were supported by the Programme. About 52% of the funds were given to institution strengthening and training activities, and the remainder for research projects.

Six of the institutions supported on a long-term basis are in China, one in Malaysia and two in the Philippines.

The programme-based grant and the joint TDR-Rockefeller Foundation grant are two new grants provided by this Special Programme. The former intends to enable institutions which already have adequate material resources to carry out high-quality research with a clearly defined objective. The joint grant allows institutions to work as partners and exchange

expertise and resources to increase clinical and epidemiological understanding of tropical diseases. It also facilitates the transfer of advanced biomedical research capabilities to laboratories in tropical countries. Three projects in the Region obtained this joint support:

(1) "*P. falciparum* malaria in Melanesia: A study of the pathophysiology and genetic factors involved in individual susceptibility" - Department of Medicine, University of Papua New Guinea, Port Moresby General Hospital, Papua New Guinea and School of Medicine, University of Oxford, United Kingdom.

(2) "A multidisciplinary approach to Philippine schistosomiasis" - College of Public Health, University of the Philippines, Manila; Research Institute of Tropical Medicine, Alabang, Philippines; and Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia.

(3) "A China-United States partnership for training and research on schistosomiasis and filariasis" - Department of Epidemiology, Shanghai Medical University, Shanghai; Guizhou Provincial Institute of Parasitic Diseases, Guiyang; and Department of Tropical Public Health, Harvard School of Public Health, Boston, Massachusetts, United States of America.

4. RESEARCH ACTIVITIES WITHIN WHO'S PROGRAMME OF TECHNICAL COOPERATION

4.1 Health systems research and development

A milestone in programme development was reached as a result of the 1987 regional workshop held in Malaysia. This meeting of health system managers and researchers had two important outcomes: a more precise definition of health systems research as a management tool, and operational guidelines for managers on how to use this tool. As a result of this meeting and the field testing in Malaysia and Papua New Guinea, a set of training materials is being finalized. These materials not only provide information on the basics of health systems research but can also be used to guide the integration of health systems research into management decision-making.

Technical cooperation is becoming a more important part of the programme's activities. Individuals from China, Papua New Guinea and the Philippines worked in Malaysia. Colleagues from the Philippines and the Republic of Korea assisted with projects in Papua New Guinea. A national health systems research workshop was conducted with staff from Fiji, Malaysia and the Philippines.

A number of individual research projects were conducted in Malaysia, Papua New Guinea and the Republic of Korea. The regional comparative study of district health system was completed in 1988 by the Institute of Hospital Services, Seoul. The study report was the focus of a regional scientific meeting on district health systems conducted in October 1988. The Institute of Hospital Services is now working on a national district health systems research and development project. This project is an attempt to implement on a district scale what was learned from the regional comparative study. It is anticipated that the intervention trials will begin in 1989 after the initial year of preparation and baseline activities.

4.2 Primary health care

Two developmental activities, namely school primary health care programmes and the development of teaching modules for the teaching of primary health care in basic nursing curriculum in the Republic of Korea, are expected to be completed by the end of the year. Both projects, when completed, will probably contribute to the revision of existing programmes.

Two projects in urban primary health care development, one in Harbin, China, and the other in Taegu, Republic of Korea, were launched in 1988, and the analysis of baseline surveys is in progress.

The first phase of a project on the development of nursing resource data bank was completed by the WHO collaborating centre for nursing development in primary health care at Yonsei University, Seoul.

Extensive and varied research and development activities, epidemiological investigations, socioeconomic studies and studies on health financing and management continued to be performed in the primary health care collaborating centres in China. These were not directly funded by WHO, although some equipment provided for the centres (Jiading and Conghua) was contributed indirectly.

The main activities reported by the Jiading County Centre, Shanghai, were on disease incidence by season correlated with medical care utilization and costs, on quality standards for village health stations, on farmers' health and smoking, on oral health conditions, and on restructuring rural health care in relation to economic reforms. The last topic was also reported by the Conghua County Centre, Guangdong, as well as studies on respiratory diseases, rheumatic fever, oral health, trachoma, nearsightedness, impact of smoking on health, impact of fluorine at different levels in drinking water, experimentation in management of village health stations, and the introduction of community-based rehabilitation. The Laizhou City Centre, Shandong, reported on a review of health care development, analysis of changes in specialized health units, a forecast of health resources and demand, research on primary health care development trends, and related socioeconomic factors.

4.3 Health education

Two studies have been supported during this biennium. They are the "Study of patient education: its impact on adherence to the health and therapeutic regimens of tuberculosis patients" by the College of Public Health, University of the Philippines, Manila, and "Study to determine the effectiveness of household teaching in improving the health status of families in two selected *barangays* in Cavite", by the Department of Health, Manila.

In 1987, the second meeting of the Sub-Committee on Health Behavioural Research was held in Manila. This meeting recommended further strengthening behavioural research by supporting medical and health education activities.

4.4 Nutrition

A study in Hong Kong on breast-feeding, infant nutrition and birth spacing will describe patterns of breast-feeding, age of weaning, duration of lactation amenorrhoea, and contraceptive use during lactation. It will review practices and policies in maternity facilities concerning the promotion and facilitation of breast-feeding with regard to infant nutrition and family planning.

The possible effect of iron supplementation on the IQ and scholastic performance of anaemic primary schoolchildren from a poor rural area in Malaysia is being investigated, in the hope that the data produced by the study will show a positive association between iron deficiency and the intelligence levels and learning abilities of schoolchildren. The result of the study will be useful for the Government in their review of the current supplementary feeding programme in rural primary schools.

In the Republic of Korea, the effects of mothers' nutritional status on the growth and health of their babies after birth up to one year of age in underprivileged classes are being studied. The study will concentrate in areas which are less advantageous socioeconomically such as urban slums in the outskirts of Seoul. The findings will provide useful information for health systems development.

A series of workshops was held in the Philippines from August to November 1987 with the objective of developing the competencies of health professionals to enable them to develop a research protocol, implement the research process and organize "echo training" for their respective staff or students. The participants included 13 physicians and 16 nutritionist-dietitians.

4.5 Oral health

An evaluation survey was conducted in 1987 by the Dental Research Unit (WHO collaborating centre), Wellington, New Zealand, to study the effects of using high fluoride concentration toothpastes on the incidence of dental caries in French Polynesian children. An analysis of the fluoride content in the hair and fingernails of these children was also undertaken.

Technical support was also provided by this WHO collaborating centre in developing and testing a community-based preventive programme for periodontal disease in Tonga. In this project, the impact of periodic education on oral hygiene and health with and without removal of subgingival calculus on periodontal health was being evaluated.

Research related to dental caries at the Institute of Dental Research (WHO collaborating centre), Sydney, Australia, included studies on the pathogenic potential of the protein components of oral bacteria, particularly streptococci and bacteroides and related immunological topics. With regard to streptococci, studies were made on proteins involved in the synthesis and hydrolysis of glucans and fructans, which are important plaque components. Also, the effect of growth conditions on the structure and adhesive properties of the dextrans and glucans that are synthesized from sucrose was examined.

Concerning periodontal diseases, studies were undertaken to examine the relation between virulence factors of oral anaerobes and response during the acute phase of inflammation. Clinically, tinidazole was evaluated as an agent used in conjunction with conventional scaling and root planing.

The Shanxi Yuncheng Stomatological Health School (WHO collaborating centre), Yuncheng, China, investigated the knowledge, attitudes and behaviour of rural communities in respect of oral health. Areas studied included knowledge of dental caries, eating habits, and toothbrushing.

4.6 Accident prevention

Epidemiological study and research on behavioural aspects of accident prevention continue. In 1988, the Department of Medical Administration, Ministry of Public Health, China, undertook a national epidemiological study on road traffic accidents and emergency medical services in China.

In view of the magnitude and nature of injuries caused while under the influence of alcohol, a survey in Fiji and Papua New Guinea was initiated to study the "role of alcohol in casualties".

In 1988, the National Health and Medical Research Council, Road Accident Research Unit of the University of Adelaide was designated as a WHO Collaborating Centre for the Prevention and Control of Road Traffic Accidents.

4.7 Workers' health

During the last two years, the following research projects were approved for financial support:

- (1) Multicentre collaborative research project on the early diagnosis and treatment of pneumoconiosis with special reference to the application of bronchofibroscopy; six institutions from China, Japan and the Republic of Korea are participating.
- (2) A field study on the hearing loss of workers induced by impulse noise in mechanical industries, by the Liaoning Institute of Labour Hygiene, China.
- (3) A study on noise-induced hearing loss among workers in selected industries in Metro Manila, by the Division of Occupational Health, National Communicable Disease Control Services, Department of Health, Philippines.
- (4) Baseline survey on occupational health in support of primary health care, by the School of Public Health, Seoul National University, Republic of Korea.
- (5) A study of a primary health care model for workers in a factory with various occupational hazards, by the National Institute of Occupational Health, Viet Nam.

- (6) Screening of respiratory impairments in anthracosis, by the Catholic Industrial Medical Centre, Republic of Korea.

The following meetings were held:

- (1) Meeting of the WPACHR Sub-Committee on Research in Occupational Health, Manila, December 1987.
- (2) Regional Working Group on Applied Research on Community-based Rehabilitation, Sydney, Australia, July 1988.
- (3) Meeting on the Early Diagnosis and Treatment of Pneumoconiosis, Tokyo, Japan, September 1988.

4.8 Alcohol and drug abuse

Support was provided to the Dangerous Drugs Board of the Philippines to identify the magnitude of drug abuse problems among the schoolchildren, focusing on the abuse of organic solvents.

In 1988, the Alcohol Research Unit, University of Auckland, New Zealand, and the National Institute of Alcoholism, Kurihama National Hospital, Japan, were designated as WHO collaborating centres to strengthen research and training capabilities for the prevention and control of alcohol and drug abuse.

4.9 Psychosocial factors and mental and neurological disorders

The limited resources for research in this field have been provided for an epidemiological study on bio-psychosocial aspects in children with emotional-behavioural problems. A collaborative study addressing these problems was undertaken in Beijing, Seoul and Tokyo. The same research design was used and an average of 6000 schoolchildren were surveyed. The outcome of the study was reported at the Asian and Pacific Congress on Child and Adolescent Psychiatry held in Singapore in April 1989.

A pilot study on the prevalence rate of age-related dementia in urban population aged 60 and over in China was conducted by the Institute of Mental Health, Beijing Medical College, and completed in 1988. The survey identified for the first time the nature and extent of the mental health problems in the elderly in China.

4.10 Clinical, laboratory and radiological technology for health systems based on primary health care

A study to review the antibiotic susceptibility of *Neisseria gonorrhoea* strains isolated in Tahiti is in progress in French Polynesia.

The WHO Collaborating Centre for Reagent Production in Shanghai, China, in collaboration with WHO, undertook the research to develop laboratory methods appropriate

for developing countries. These include the immunoassays (principally enzyme-linked immunosorbent assay and latex agglutination tests) for diagnosis of viral hepatitis and other viral infections; streptococcal and other bacteriological infections; and malaria and other parasitic diseases.

4.11 Traditional medicine

Two research studies have been completed during this biennium:

(1) A study entitled "Evaluation of traditional medicine in the North Solomons Province, Papua New Guinea", was conducted by the Papua New Guinea Institute of Medical Research in cooperation with the North Solomons University Centre, focusing on malaria, skin diseases, contraception and infertility in four different places in the North Solomon Islands. The study revealed that traditional medicine continued to be actively practised along with the modern health services, and village healers still had a significant role to play within the cultural milieu of rural communities.

(2) "A feasibility study on the integration of traditional medicine into primary health care in Korea" was conducted by the Korea Institute for Population and Health, Seoul. The study made a survey of 3091 households. The results showed that in chronic cases, more people visited the Korean oriental medicine doctors; the number of people using folk medicine was the same in rural and urban areas; the folk medicine used was based on the principles of Korean oriental medicine; more than half the respondents said that Korean oriental medicine and folk medicine contributed to the patients' "full recovery and favourable improvement."

Many studies have been conducted in the 12 collaborating centres for traditional medicine in the Region, such as pharmacological and toxicological studies in anti-cancer traditional drugs; immunological study of traditional drugs for auto-immune disease; study on "kidney" disease based on both modern and traditional medicine concepts; clinical study of acupuncture on cardiovascular diseases; action mechanisms of acupuncture; and others.

4.12 Disease vector control

During the past several years, operational research and training projects on the use of pyrethroid-impregnated mosquito nets to control malaria vectors have been supported in China, Malaysia, Papua New Guinea, Solomon Islands and Viet Nam. This technique has reduced vector densities and the incidence of malaria cases by 70% or more. As a result of these research and training activities, impregnated nets are being used on an operational scale in several countries. Additional field projects and epidemiological evaluation will be promoted in malarious countries where this technique has not been used on a large scale, such as the Lao People's Democratic Republic, the Philippines and Vanuatu. Attention will also be given to implementing projects to control filariasis vectors in Samoa and Tonga.

4.13 Malaria

The Army Malaria Research Unit in Australia has been redesignated as a WHO Collaborating Centre for malaria for a further period of four years effective April 1988. The research activities being carried out by the Centre include: pharmacokinetic studies on

blood/plasma concentrations of old and new antimalarials including proguanil and halofantrine; the susceptibility of *P. falciparum* malaria to antimalarial drugs in individuals who had acquired their infection overseas; entomopathogens of mosquitos as candidate biological control agents (microsporidian *Amblyospora*; fungus *Culicinomyces*); and *A. farauti* species complex studies.

A study to evaluate the project on the integrated malaria control measures in Region IX, Philippines, is being undertaken in Zamboanga by the Department of Health.

4.14 Parasitic diseases

Major constraints in controlling schistosomiasis in China were discussed at the WPACHR Sub-Committee on Schistosomiasis which met in Manila in December 1987. In the lake regions, the control programme is hampered by flood waters in five provinces along the Changjiang River, which form new snail breeding places. Migration of boatmen and fishermen, who are difficult to treat with chemotherapy, as well as the presence of bovine reservoir hosts contribute to the problem. The Institute of Parasitic Diseases in Shanghai was awarded a research grant to look into the schistosomiasis problems in the mountainous regions and help develop improved control approaches in those areas. Support was also provided to the Institute of Parasitic Diseases, Zhejiang Academy of Medicine, China, to evaluate chemotherapy measures for the control of soil-transmitted helminthiasis.

4.15 Diarrhoeal diseases

The emphasis of the research was shifted from the purely etiological to more problem-solving and behaviour-oriented studies. Only one of the seven projects currently being supported involves the identification of etiological agents (Viet Nam).

The China study is looking at the treatment of acute diarrhoea with a traditional Chinese medicine.

A potential "super ORS" with glucose polymers has been tried in the Philippines but was unsuccessful. The remaining four projects (one in New Zealand, one in Papua New Guinea and two in the Philippines) are related to the study of morbidity reduction by means of interventions such as breast-feeding and improved weaning practices, improved water supplies and behavioural risk factors in relation to diarrhoeal morbidity.

4.16 Acute respiratory infections

Health systems research for child pneumonia control in the community began in March 1988 in 52 communes with 37 000 children under 5 years of age in Tanh Hon and Ha Son Binh Provinces, Viet Nam. Baseline data on mortality and treatment patterns were collected. Following are highlights of the results of KAP studies: (1) after initial in-service training on acute respiratory infections, the practice of health staff improved only where there was follow-up supervision or retraining; and (2) twenty per cent of the mothers did not understand the important signs of pneumonia. The impact of training and health education will be assessed from changes of KAP in the health staff and the mothers, and from mortality reduction if possible.

Activities in the prevention and management of pneumonia in rural communities in China were initiated in Sichuan Province and Beijing municipality in April 1983. The baseline data showed high infant mortality (65.6 per 1000 live births) in Nambu county and low utilization of health services. After the training of village doctors, overdiagnosis and overtreatment still continued, which indicates that supervision and retraining should be emphasized.

A multicentre etiological study of pneumonia in children in China involving three institutes in Chanchun (North), Beijing (Central) and Guangzhou (South) started in April 1987. A bacteriological study showed that nasopharyngeal secretion specimens are not useful to identify pathogens because there was no difference in the bacterial isolation rate between patients with pneumonia and healthy children. Therefore, blood culture remains the method of choice for bacterial isolation. Virological study has demonstrated the importance of adenovirus type 3, type 7 and respiratory syncytial virus. Adenovirus pneumonia and its epidemiology in Changchun should be investigated further.

Health systems research for child pneumonia control was also undertaken in Sinbu Province, Papua New Guinea, beginning in September 1987. The main finding was that even simplified WHO standard case management was not easily followed. Health workers had difficulty in counting the respiratory rate, made wrong assessments of patients even after accurate recording of signs and symptoms, or provided inappropriate treatment even after making a correct assessment. However, the error rate in case management was reduced by proper supervision over a six-month period. The impact of the training and health education will be evaluated by monitoring the knowledge and practice of health staff and mothers.

4.17 Leprosy

During this biennium, comparative studies using gelatin particle agglutination and enzyme linked immunosorbent assay tests to detect leprosy antibodies were performed in laboratories in China, Fiji, Malaysia, the Philippines, the Republic of Korea and Viet Nam. The objective was to identify the test of choice for its simplicity and applicability under field conditions for assessing the effectiveness of multidrug therapy and for early detection of relapse.

Studies to detect antigens have been initiated in the Republic of Korea.

4.18 Zoonoses

An epidemiological study by the Philippine Department of Health confirmed the wide distribution of rabies in the country and revealed that domestic dogs were commonly involved in fatal human cases. Control programmes need to emphasize responsible dog ownership. A research grant was also awarded to the Philippine Council for Health Research and Development for toxicological studies on shellfish involved in paralytic shellfish poisoning (Red Tide poisoning) in Manila Bay. The study will characterize the properties of the toxins produced by dinoflagellates, with the ultimate aim of developing a surveillance system to predict future outbreaks.

4.19 Other communicable disease prevention and control activities

Since the hepatitis B immunization strategy is directed towards the newborn, a project to determine the feasibility of integrating hepatitis immunization of the newborn into the Expanded Programme on Immunization began in Long An County, Guangxi Province, China, in December 1987.

Two research proposals from Japan to develop the recombinant DNA Japanese encephalitis vaccine were supported. The vaccine was successfully developed. Three research proposals on the development of killed Hantaan virus vaccine from China, Japan and the Republic of Korea were also supported.

4.20 Prevention of blindness

In the Republic of Korea, a survey of approximately 2800 schoolchildren in the urban areas was undertaken to determine the prevalence of various levels of visual impairments and the corresponding pattern of refractive errors. A simple vision screening methodology was tested, and students with visual acuity of less than 0.7 were examined further to assess refractive status. A questionnaire to collect information on previous eye diseases or treatment, as well as reasons for not having spectacles, was developed. This study forms the basis for the development of vision testing and provision of spectacles as part of school health services in the Republic of Korea.

The Department of Ophthalmology, Juntendo University, Tokyo, a WHO Collaborating Centre for the Prevention of Blindness, provided technical support for Chinese workers to conduct a cataract survey in Tibet, which turned out to be an excellent example of collaboration between two countries in the Region. The survey was made because there had been conflicting reports, some indicating very high incidence of cataract in Tibet, which turned out to be misleading.

With the designation of the Beijing Institute of Ophthalmology, the Region now has two collaborating centres for the prevention of blindness. It is hoped that this will further accelerate the national efforts to reduce blindness rates and restore sight to the curable blind.

4.21 Cancer

A research grant was provided to the Department of Dentistry, University of Papua New Guinea, for a collaborative case-control study on oral cancer in Papua New Guinea. This study has examined risk factors for oral cancer in Papua New Guinea, especially the chewing of betel nut.

5. THE TWELFTH SESSION OF THE WESTERN PACIFIC ADVISORY COMMITTEE ON HEALTH RESEARCH, 1988

The Western Pacific Advisory Committee on Health Research (WPACHR) held its twelfth session in Manila from 8 to 11 April 1988. Members reviewed progress in implementing the major recommendations adopted at the eleventh session and considered reports and discussion papers on various aspects of research at the global, regional and

national levels. Reports from WPACHR sub-committees were received and discussed. The Summary and Recommendations of the Committee's report covered health research strategy, national health research councils, technology transfer, tropical diseases research, health behaviour research, occupational health research, schistosomiasis, nutrition and health systems research. Further information may be found in the report.

The Western Pacific Advisory Committee on Health Research:

1. *Noted* the report of the WPACHR Secretary and the actions taken by the Secretariat in relation to the recommendations made at the eleventh session.

2. *Requested* that those recommendations still needing attention should be kept under review by the Regional Office.

(Global ACHR)

3. *Discussed* the report of the 28th session of the Global ACHR, held in October 1986.

(Health research strategy)

4. *Discussed* the document "Health research strategy for health for all by the year 2000: Revised report of the global ACHR Sub-committee" and the replies to a widely-distributed questionnaire on this document and on the interim response prepared by a WPACHR sub-committee. The Advisory Committee *endorsed* the main thrust of the Global ACHR document and *noted* that its fresh perspective offered one helpful input into the process of development of national health research strategies.

(National health research councils)

5. *Noted* responses received following wide circulation of the document "International cooperation in health research and technology transfer through national health research councils or analogous bodies" which had given strong encouragement to the concept of the development of such councils and of cooperation between countries.

6. *Noted* that only a few countries of the Region have so far developed national health research councils and *recommended* that WHO should be prepared to support the visit of a small task force to some countries in the Region in 1988-1989. The purpose of the visits would be to discuss with appropriate national organizations the possible establishment of a national health research council, and the collaboration of such a council with similar bodies in other Member States of the Western Pacific Region.

7. *Noted* the intention of the Regional Office to hold a meeting of the directors of health research councils or analogous bodies in 1989 which would receive reports of any task force visits which had already occurred, and *endorsed* the need for regular meetings of this kind.

8. *Expressed* some concern over a possible multiplicity of organizations concerned with areas such as technology transfer, health services research and other health-related research.

The Committee *urged* that adequate coordinating mechanisms be established at national levels to ensure a uniform approach and emphasized the need for members of the WPACHR to maintain close liaison with their national health research communities and national health authorities on the one hand and with the WHO Regional Office on the other.

(Technology transfer)

9. *Noted* the outcome of the Bi-Regional Conference on Technology Transfer in the Health Field and agreed in principle with those recommendations directed to provider and user countries within the Region.

10. *Noted and agreed* in principle with the recommendations of the Bi-Regional Conference which requested that serious and detailed consideration be given by WHO and Member States to these recommendations from, among others, the point of view of research development and utilization.

11. *Noted and agreed* in principle with the recommendations of the Bi-Regional Conference that in response to concerns about the research utilization, WHO and Member States consider the management of technology transfer as an effective and efficient mode of sharing research outputs and utilizing such outputs in health service delivery, as well as providing appropriate directions for future research.

12. *Endorsed* the recommendations of the Bi-Regional Conference to develop a programme to eradicate poliomyelitis, using procedures based on those successfully employed previously by many developed countries. As a first step it *recommended* an assessment of the feasibility of eradicating poliomyelitis in the Region, and if such evaluation so indicates, the adoption of a policy to eradicate poliomyelitis by Member States in the Western Pacific Region.

(Tropical diseases research)

13. *Noted* the progress made by the Special Programmes for Research and Training in Tropical Diseases during the period 1986-1987 and that tropical diseases are still major problems in this Region.

(Human reproduction research)

14. *Noted* the progress made by the Special Programme on Research, Development and Research Training in Human Reproduction and *endorsed* the report provided by the programme, recognizing that this Region has many major problems relating to human reproduction. The Committee directed attention particularly to the components of safe motherhood, family development and child survival.

(Health behaviour research)

15. *Noted* the progress of the Sub-Committee on Health Behaviour Research (HBR) and the difficulties which have been encountered in the further advancement of this field. The Committee *reaffirmed* its recognition of the importance and value of behaviour research in the field of health.

16. *Recommended* that health behaviour research be further developed through support for pilot projects and descriptive/diagnostic studies in health behaviour research demonstrating the methodology and benefits of this discipline; support for emphasizing research in health behaviour aspects of biomedical and health system investigations; support for appropriate applications of health behaviour research outputs in primary health care and disease control programmes; and the establishment of WHO collaborating centres in health behaviour research in the Region.

17. *Endorsed* the recommendation of the HBR Sub-Committee that priority should be given in health behaviour research to the three areas of cardiovascular risks modification, AIDS prevention and mental health, especially addiction behaviour and mental health of the elderly.

(Occupational health research)

18. *Noted* the report of the Sub-Committee on Research in Occupational Health and *endorsed* the recommendations of this Sub-Committee.

19. *Noted* the progress being made by WHO and Member States in including WHO collaborating centres for occupational health, and *recommended* that the Sub-Committee on Research in Occupational Health should meet in one or two years to review the results of implementation of the proposed research projects and other recommendations. The Committee recognized the increasing importance of occupational health problems in both industrialized and developing countries in the Region and the need for developing an occupational safety and health programme to meet the goal of health for all by the year 2000.

20. *Recommended* that research in occupational health (a) should be included in the list of health research priorities; (b) should emphasize the priority needs of underserved working populations in small-scale industries and agriculture; (c) should be organized and undertaken through intersectoral and multidisciplinary cooperation and participation at all levels and through collaboration among Member States; and (d) should emphasize the psychosocial problems in occupational activities, and major occupational diseases such as pneumoconiosis, occupational hearing loss and chemical poisoning.

(Schistosomiasis)

21. *Noted* the report of the Sub-Committee on Schistosomiasis and *endorsed* the recommendations made by the Committee. In recognition of the current epidemiology and control measures being taken in the Philippines and China, the following specific research areas need attention: epidemiology of the infection; behavioural aspects in control measures; cost-effectiveness of various control measures; and development of more sensitive diagnostic tools.

22. *Recommended* that the Sub-Committee on Schistosomiasis be now discontinued in view of the localized nature of the remaining problems.

(Diarrhoeal diseases)

23. *Recommended* also that the Sub-Committee on Diarrhoeal Diseases be discontinued, in the light of new CDD guidelines.

(Nutrition)

24. *Discussed* the paper "Food policies, nutrition and health: Some reflections on related research priorities" and expressed the hope that related research priorities would receive WHO support. *Agreed* that WHO's research priorities in the area of nutrition should concentrate on nutrition of the young child and mother with emphasis on infant feeding practices, improvement of nutritional status of the pregnant and lactating mother and nutrition education.

25. *Reaffirmed* the importance of the field of nutrition research, including behavioural studies, but noted that the strategies for research were still unclear and hoped for more focused guidelines by the time of the next meeting.

(Health systems research)

26. *Noted* the progress made so far in the area of links between health systems research and national managerial processes and *recommended* that the current strategy being used to promote the institutionalizing of health systems research in the managerial processes for national health development be continued, with an evaluation report on its impact to be presented to the next meeting of the Sub-Committee on Health Systems Research.

27. *Recommended* the encouragement of more and stronger links between health systems researchers and institutions on the one hand, and institutions responsible for the education and training of health managers on the other.

28. *Recommended* that priority should be given to projects which will contribute to further developing the district health system approach; financing mechanisms that will more explicitly address the amelioration of priority health problems and social concerns such as equity; and technology for the evaluation and assessment of health services.

29. *Recommended* that additional efforts be supported to strengthen the links between collaborating partners within the Region through the mechanism of the health systems research support network. Special efforts should be made to experiment with the exchange of regional expertise as an efficient means through the network concept.

Table 1. Summary of research projects funded by the WHO Regional Office for the Western Pacific for 1987-1988

	Australia	China	Fiji	Japan	Malaysia	Papua New Guinea	Philippines	Solomon Islands	Rep. of Korea	Tonga	Vanuatu	Viet Nam	TOTAL
Accident prevention	1												1
Acute respiratory infections	1	2	1			1	1	1			1	1	9
Cancer						1							1
Cardiovascular diseases							1						1
Disease vector control		1	1		1				1			1	5
Environmental health		1			2							2	5
Health education							1						1
Health of the elderly	2		1										3
Health information							1		1				2
Health systems research					1				2				3
Leprosy				1	2				1				4
Malaria							4		1				5
Maternal and child health, including family planning							3		1				4
Nursing		1											1
Nutrition					1								1
Other communicable diseases		3		4	2		1		1				11
Other noncommunicable diseases		2		1			2			2			7
Parasitic diseases		4					2					1	7
Prevention of blindness									1				1
Prevention and control of alcohol and drug abuse	1	1											2
Prevention and treatment of mental and neurological disorders		2		3					1				6
Primary health care		1				1			8		1		11
Workers' health				1			1		2			1	5
TOTAL	5	18	3	10	9	3	17	1	20	2	2	6	96

Table 2. Summary of collaborating centres in the Western Pacific Region (as of 31 December 1988)

	Australia	China	Hong Kong	Japan	Malaysia	New Zealand	Papua New Guinea	Philippines	Rep. of Korea	Singapore	Viet Nam	TOTAL
Accident prevention	1											1
Acute respiratory infections		1					1					2
Cancer		3		1								4
Cardiovascular diseases	2	3		2				1				8
Disease vector control	1	1		1	1			1				5
Environmental health	2			5								7
Food safety		1		1		1						3
Health education		1										1
Health of the elderly	2			1								3
Health information		2		1								3
Health laboratory technology	4	4		2						2		12
Hospital administration				1					1			2
Malaria	1											1
Maternal and child health, including family planning	2	4						1	1	3		11
Oral health	1	2					2					5
Other communicable diseases	3	2		10	1				2	1		19
Other noncommunicable diseases	2	1		2		1				1		7
Parasitic diseases	3	5		2	1			1	2			14
Pharmaceuticals	1	1										2
Prevention of blindness		1		1								2
Prevention and control of alcohol and drug abuse				1	1	1						3
Prevention and treatment of mental and neurological disorders	2	6		1								9
Primary health care	1	4			1				2			8
Radiological technology	2			4		1				1		8
Rehabilitation	1	1	2					1				5
Research promotion and development	1			1								2
Sexually transmitted diseases	1									1		2
Traditional medicine		7		2					2		1	12
Tuberculosis				2								2
Workers' health	1	2		2					1	1	1	8
TOTAL	34	52	2	43	5	6	1	5	11	10	2	171