With reference to resolution WPR/RC34.R17 adopted by the Regional Committee at its thirty-fourth session, this document: (1) reports on the major activities carried out by the regional research promotion and development programme; (2) draws the attention of the Regional Committee to the activities of the WHO Special Programmes in the Region and to various research activities conducted within the framework of WHO technical cooperation programmes in the Region; (3) sets out for review and endorsement by the Regional Committee a summary of the recommendations made by the Western Pacific Advisory Committee on Medical Research (WPACMR) at its tenth session in April 1985.
Historically, the strong interest of WHO in health research stems from article 2(n) of its Constitution, which assigns to the Organization the functions "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. In this context, WHO's policy has been to support the building up of national research capabilities, particularly by developing Member States, in order to carry out health research relevant to the solution of health and health-related problems, and also to intensify its efforts to promote effective and efficient systems for health research management, including information support for research. Emphasis is being given to problem-solving oriented research rather than to basic or fundamental research.

WHO's research programmes generally have two interrelated objectives: (i) to obtain research results that are relevant and applicable, and (ii) to strengthen the research capacity of the countries themselves. These two objectives are evident in the work of large research programmes such as the Special Programmes on tropical disease research and human reproduction research and the diarrhoeal disease research programmes. However, in one way or another, they should underline all the research programmes of WHO.

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

1.1 National health research management mechanisms

Member States have been encouraged through a number of Regional Committee resolutions and through working group meetings of directors of health research councils or analogous bodies to develop adequate mechanisms at national level for effective research coordination in order to relate research priorities to the solution of major health or health-related problems.

In this context, efforts have been made to disseminate the concept of national research programme planning as part of the managerial process for national health development so as to orient research towards the solution of priority problems. Although there are considerable differences between countries in regard to the stage of development of national research councils, increasing interest has been expressed in this area. In the Philippines, a National Health Council has been firmly established, medical research committees are already functional in Malaysia, Papua New Guinea and Singapore, while the Government of the Republic of Korea has carried out a feasibility study on the establishment of national mechanisms for research coordination. With a view to discussing further ways of promoting national research programme planning, a meeting of directors of health research councils or analogous bodies was held with some success in Penang, Malaysia, in December 1984.
1.2 Setting of regional research priorities

WPACMR has recently re-examined existing regional research priorities in the light of the health-for-all strategies. In reorienting the priorities, greater consideration was given to health systems research, appropriate technology for health and behavioural aspects of health. A list of priority research issues in relation to health for all has been widely distributed to ministries of health and health research institutions in the Region.

In the day-to-day management of regional resources for research, priority is being given to the following areas:

- health systems research;
- diarrhoeal disease control;
- acute respiratory infections;
- disease vector control;
- schistosomiasis and other parasitic diseases;
- hepatitis.

1.3 Strengthening of national research capability

In the development of infrastructure for research, attention has been focused on research manpower development through short courses on research methodology training, the award of research training grants, collaboration in the design of research protocols and the provision of modest financial support. The WHO Regional Centre for Research and Training in Tropical Diseases (Institute for Medical Research, Kuala Lumpur) is playing a key role in designing and conducting national courses in research methodology. Since 1979, a total of 90 research training/visiting scientist grants have been awarded by the Regional Office. In response to a request received from the Government of Malaysia for collaboration in the organization of research methodology training courses, technical cooperation was provided for a national workshop on research methodology at the Universiti Kebangsaan Malaysia, Kuala Lumpur, in May 1984. So far, six national workshops have been held in the Region.

Despite the criticisms levelled at short training courses, the Joint SEAR/WPR Meeting of Directors of Health Research Councils or Analogous Bodies confirmed their relevance to the situation in developing countries and agreed that, without them, the urgent need for more health research workers could not be met. They should not be seen as an end in themselves but as the first step in a continuing training process, bridging the gap between new recruits and fully trained research workers. These workshops represent a significant step in the development of research methodology training, which is one of the key components of research capability strengthening. At the request of the Government of the People's Republic of China, another workshop will be conducted in China in August 1985. Encouraging progress has been made in strengthening the institutional capability of the WHO Regional Centre for Research and Training in Tropical Diseases. The Centre has played an active role in formulating approaches as well as in providing a framework for the training of research workers in the Region.
1.4 Support for research projects from the Regional Office

Research grants awarded by the Regional Office started from a zero base in 1977 to reach a total value of US$1,392,258 in 1983. During the period under review, thirty-one additional research contracts were awarded for a total cost of US$375,462 (cumulative total value of US$1,767,720 for a total of 125 research projects). Research grants awarded by programme area are shown in the Annex.

1.5 Regional biomedical information programme

The regional biomedical information programme, which started formally with the meeting of the Regional Working Group of National Focal Points for the Regional Biomedical Information Programme in Manila in December 1981, made slow but steady progress during this period. A second meeting of the Regional Working Group is being planned in November 1985. Formulation of a workplan and timetable for the regional biomedical information programme will also be undertaken at the meeting.

Countries or areas that have not designated appropriate national focal points will be requested to do so. Preparations are being made to hold a regional training course on health library operations and management in Singapore in November 1985. Nineteen medical and health librarians from nine developing countries in the Region will be invited to participate in the course.

2. ACTIVITIES CARRIED OUT BY THE SPECIAL PROGRAMMES IN THE REGION

2.1 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 resources for research.

During the reporting period, the Special Programme provided a sum of US$2,100,000 to support research projects in the Region. The majority of 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 services aspects of family planning.

Many of the programme's activities in the Region address the strengthening of capabilities for research in family planning through the provision of support to institutions for the purchase of equipment and supplies, together with research training and collaboration in developing expertise and planning research. In 1983, the Special Programme provided support to ten institutions in the Region for institution strengthening.
2.2 Special Programme for Research and Training in Tropical Diseases (TDR)

The Special Programme's activities continued to make steady progress in 1984. From its formal inception in 1975 until 31 December 1984, the Special Programme has supported 250 projects in the Region.

In 1984, seventeen new research projects covering eight countries in the Region were funded. Twelve research training grants were awarded in 1984 making a total of seventy-five grants. In the area of institution strengthening, a capital grant was awarded to Hubei Provincial Academy of Medical Sciences, Wuhan, China. The long-term grants for Universiti Sains Malaysia, Penang, and Institute of Parasitic Diseases, Shanghai, were renewed for the fifth and fourth year respectively. Extension for long-term support for an additional three years beyond the normal five years was exceptionally approved for the Institute of Malariology, Parasitology and Entomology, Hanoi. The five-year period of support for the Institute for Medical Research, Kuala Lumpur, was completed at the end of 1984.

In 1984, the Special Programme provided US$1 297 522 for TDR-supported projects in the Region.

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

The descriptions of research activities under various technical cooperation programmes are based on contributions from the respective regional programme managers.

3.1 Health systems research

The health systems research programme aims to develop national and regional capability to plan, implement and evaluate studies related to health systems development and management. The strategy adopted to achieve this aim is to promote the use of health systems research as a means of improving the managerial processes for national health development. The priority activities of the programme have been focused on (i) strengthening national capabilities (both individual and institutional) to undertake health systems research studies, (ii) providing support to health systems research studies, and (iii) sharing among countries, institutions and individuals experiences and information on applying health systems research.

Malaysia has been using research for some time as a method to provide additional information on the operation of its health system. As has been the experience in many countries, Malaysia has also reached the conclusion that there may be more effective ways of using research results to promote health systems development. With this concern in mind, WHO is collaborating with Malaysia through consultants and workshops on ways to integrate health systems research with health systems management.

In Fiji, a management development project through health systems research has recently been initiated. This project will examine various ways to strengthen the management of the national health services. The initial activities are concerned with manpower requirements for the national referral hospital.
Support was provided to the Institute of Hospital Services, Seoul National University, Republic of Korea, to update a health resource allocation model, which will give a long-term forecast of health manpower and other requirements of health facilities. Collaboration continues with the Philippines to improve the efficiency and effectiveness of the provincial and district hospitals. A draft report has been prepared, which documents the hospital utilization research study.

The methodology of research activities in primary health care development is research and development, which is more operational in its nature. Research and development activities have been introduced in Fiji, Kiribati, Lao People's Democratic Republic, Malaysia, the Philippines, the Republic of Korea and Vanuatu. In urban areas, research and development is also being applied in Manila and Seoul.

Malaysia and the Republic of Korea participated in a consultation at Yaounde, Cameroon, in July 1984, organized by WHO Headquarters, to review the draft health systems research training package developed by Headquarters and to discuss possibilities for the implementation of health systems research training in countries.

The inventory of health systems research in selected countries of the Region continues to be distributed and will be updated from time to time.

3.2 Health manpower research

The following are research and development activities related to health manpower for primary health care development:

Republic of Korea

(a) Evaluation of the community health practitioners programme in the Republic of Korea, 1984.

(b) Assessment of curriculum management of the community health practitioners training institution, 1985.


Philippines

(a) Assessment of public health nurses' performance in primary health care delivery in the Philippine setting, 1984.

(b) Assessment of the adequacy of training programmes in primary health care for basic nursing, 1985.


Regional Teachers Training Centre, Sydney

In the Regional Teachers Training Centre in Sydney, the following research activities have been or are being conducted in the field of education of health personnel:

(a) Evaluation studies on innovative nursing curricula in Australia.

(b) The utility of student interviews in selection at the Faculty of Medicine, Sydney.
A study of changes in students' attitudes to medicine as they progress through the course.

An observational study of clinical teaching in one teaching hospital of the University.

Evaluation of self-instructional materials in collaboration with the School of Biochemistry.

3.3 Nutrition

China

Studies on breast-feeding are continuing at the Department of Paediatrics, Shanghai Children's Hospital, on the volume and composition of breast-milk. This project is supported by Headquarters funds.

A study on growth and development, diet and diseases in young children in Shanghai by the Department of Paediatrics, Shanghai Children's Hospital, is continuing during 1985. This project is supported by Headquarters funds.

Hong Kong

The study on breast-feeding and promotion of breast-feeding through urban health centres, which was supported by Headquarters during 1983-1984, will be completed in 1985. The final report will be available towards the end of the year. Funds for 1985 amounting to US$10,000 have been provided by Headquarters.

Malaysia

The studies on endemic goitre in Kedah, to review the etiology of goitre and the effect of goitrogenic substances, will be completed in 1985.

Papua New Guinea

The study on maternal attitudes towards lactation has been completed and the report is still awaited from the principal investigator.

Philippines

The first phase of the study on integration of nutrition in urban primary health care has been completed. This project has shown the feasibility of incorporating simple nutritional elements in existing primary health care activities in urban areas.

3.4 Oral health

In view of the high prevalence of gingivitis and periodontitis in the majority of countries in the Region, research on the periodontal profile and on factors associated with the reportedly better periodontal health among diving women (known locally as 'ama) is being carried out in the Republic of Korea. This research project has the following objectives: (i) to determine the prevalence and distribution of periodontitis, gingivitis and calculus among these diving women as compared with other villagers; (ii) to study the role of salt (sea) water rinsing in the suppression of gingival inflammation.
Since the recent development of the community periodontal index of treatment needs (CPITN), a number of epidemiological surveys have been conducted using this index.

To enable the developing countries to plan and manage the development of their own preventive programmes for the welfare of children, a five-day workshop on children's oral health was conducted in Wellington, New Zealand, in May 1985.

3.5 Maternal and child health

Risk approach study

The Regional Office will recruit two consultants to review the status of the risk approach in maternal and child health in the Region. Five countries (China, Fiji, Malaysia, the Philippines and the Republic of Korea) will be visited by the consultants, who will prepare a state-of-the-art paper to provide information to Member States and make recommendations for further collaboration.

China held a national workshop on the risk approach in perinatal care in June 1985. Data from the Shunyi County study on perinatal mortality will be used to analyse the strategies and will be subsequently developed for the delivery of perinatal care.

Other research activities

Research activities in other areas include the following:

(a) Collaborative research on home-based mothers' records - Philippines.

(b) Collaborative study on causes of maternal deaths and unmet needs - Papua New Guinea and Viet Nam.

(c) Research on infant mortality - Republic of Korea.

(d) Collaborative study on physical growth and psychosocial development in children - Shanghai Institute for Paediatric Research, China.

(e) Follow-up activities on the medical outcome of adolescent child birth research findings in Seoul, Republic of Korea.

(f) Studies on the reproductive health of adolescents in Sarawak, Malaysia.

3.6 Care of the elderly

An intercountry workshop on health of the elderly was held in Fukuoka, Japan, in October 1984. This marked the completion of the cross-national study in Malaysia, the Philippines and the Republic of Korea and coincided with the commencement of field work in Fiji.

Present at the meeting were participants, observers and advisers from Australia, China, Fiji, Hong Kong, Japan, Malaysia, New Zealand, the Philippines, the Republic of Korea and Singapore. The objective of the workshop was to produce some concrete recommendations to guide future action in the area of health care of the elderly.
3.7 Mental health

During the period April 1984 - March 1985, there has been a steady increase in mental health research activities in the Region. Nine WHO collaborating centres for mental health/neurosciences in the Region have developed research activities in close collaboration with WHO.

A meeting of heads of WHO collaborating centres was held for the first time at the Tokyo Medical and Dental School in October 1984, with the participation of leading mental health experts and behavioural scientists. The meeting reviewed the main achievements, present status and future plans of each collaborating centre in the areas of training and research. It also discussed ways of promoting coordination between centres and developing collaborative research activities and training in line with the medium-term mental health programme under the Seventh General Programme of Work.

Several recommendations were made for the promotion of mental health/health behaviour research and training in the Region.

The following topics were considered to have high priority and to be feasible as mental health research activities:

(i) mental health delivery system;
(ii) epidemiological studies of psychiatric disorders;
(iii) studies of children with emotional and behavioural problems;
(iv) training of primary health care workers in mental health;
(v) clarification of criteria for psychiatric diagnoses used in the Region;
(vi) studies of mental disorders in the aging population;
(vii) studies of psychosocial and biological aspects of alcohol-related problems in different ethnic groups and cultures.

During the period under review, the following research proposals were approved for WHO's financial support:

(a) Regional collaborative study on affective disorders. The Nagasaki and Shanghai centres will study the prevalence, nature, type and psychosocial background of affective disorders (depression, neuroasthenia, etc.) and also make correlated studies on diagnostic validity for comparison.

(b) Regional mental health profile. This study entails the collection of basic information on mental health legislation, services, training, etc. in ten countries or areas using the same format.

(c) Shanghai-Singapore collaborative study on "Housing environment, family function and child mental health". The study comprises collaborative studies on child mental health in different socio-cultural backgrounds.
3.8 Traditional medicine

Intensive research on acupuncture and acupuncture anaesthesia was carried out in the four collaborating centres in China, namely, Institute of Acupuncture in Beijing, Nanjing College of Traditional Chinese Medicine, Shanghai College of Traditional Chinese Medicine, and the Department of Acupuncture Research of Shanghai First Medical College. Progress in the research was reported in the Second National Symposium on Acupuncture and Acupuncture Anaesthesia in Beijing in September 1984.

The Institute of Chinese Materia Medica, Academy of Traditional Chinese Medicine, Beijing, continues to carry out studies on different aspects of Chinese medicinal plants. Special attention has been given to Qinghaosu - the antimalaria drug. This research is being conducted in cooperation with the WHO Special Programme for Research and Training in Tropical Diseases.

3.9 Disease vector control

Several new projects have been implemented since the last reporting period. A study at the Institute for Medical Research, Kuala Lumpur, on the laboratory bionomics of Mansonia vectors of brugian filariasis is expected to yield a continuous source of specimens for transmission investigations. A study on field collecting methods for the mite vectors of scrub typhus in Malaysia should provide a simple means of determining the presence of mites in oil palm plantations and other areas where transmission could occur.

In Papua New Guinea, a project is under way on the evaluation of impregnated mosquito nets against Anopheles farauti. Initial results from the Institute of Medical Research, Madang, show that the nets, impregnated with permethrin, can be quite effective in killing adult mosquito vectors for at least two months after treatment. A large-scale test is also being carried out in China against Anopheles balabacensis, the results of which are awaited. In Malaysia (Sabah State), untreated mosquito nets are being evaluated against malaria and filariasis vectors.

In conjunction with efforts to promote the greater use of appropriate measures for community use, the Department of Entomology, Universiti Sains, Penang, Malaysia, is undertaking field trials on the effectiveness of mosquito coils against natural mosquito populations. Detailed information on the effectiveness of mosquito coils under field conditions is surprisingly lacking in most parts of the world.

3.10 Malaria

The WHO Special Programme for Research and Training in Tropical Diseases continued to support research activities on malaria. As of December 1984, the Special Programme had supported 51 malaria research projects and activities. These include projects pertaining to parasites, chemotherapy, immunology, vectors and their control and epidemiology.

High priority has been given to research for the development of new antimalarial drugs in view of the threat posed by the spread of drug-resistant strains of P. falciparum. The new drugs - mefloquine and Qinghaosu and their derivatives - are being field-tested with the support of the Special Programme for Research and Training in Tropical Diseases in several countries in the Region. Mefloquine and its combination with sulfadoxine and pyrimethamine will complement other widely used antimalarials but their use will be strictly restricted to areas where multidrug resistant falciparum malaria occurs.
The WHO standard micro test kits continue to be produced by the Malaria Eradication Service, Manila, for distribution to scientists in areas within and outside the Region.

3.11 Parasitic diseases

The advent of the new oral anti-schistosomal drug praziquantel has boosted and revitalized national programmes for the control of schistosomiasis and other trematode infections. Four individual research studies started in 1983 with WHO support have now been concluded.

The activities of the filariasis control project in Samoa were reviewed. It was concluded that mass drug administration using diethylcarbamazine citrate at a dose of 6 mg/kg body weight once a year is an effective means of reducing the microfilaria rate and density. The information exchanged during the review should prove extremely valuable in strengthening, planning and implementing new and improved methodology for surveillance and control of the disease in the South Pacific.

A research study on the relationship between Clonorchis sinensis infection and cholangiohepatoma has recently been concluded in the Republic of Korea with Regional Office support. The operational pilot project studies being conducted in the same country on the control of clonorchiasis and paragonimiasis have satisfactorily progressed for the second year.

3.12 Diarrhoeal diseases

The diarrhoeal disease control programme is based on two approaches: (a) development of national control programmes within existing health systems, and (b) research aimed at improving the control measures to be used. Reduction of mortality using oral rehydration salts is the foremost aim of the programme.

The management of diarrhoeal disease research at regional level has been facilitated by the Sub-Committee on Diarrhoeal Diseases, which was established in 1979 and has already held four sessions. Since 1979, the programme has provided support to thirteen research projects, of which two have been completed and final reports received (from New Caledonia and the Republic of Korea). The project in Tonga has not been concluded owing to managerial difficulties, while the remaining projects are in operation. The fourth session of the Sub-Committee was held in Shanghai, China, with the objectives of collaborating with Chinese investigators in formulating research proposals and reviewing ongoing research projects in the Region. The Chairman of the Sub-Committee visited Viet Nam in January 1985 to ascertain the possibility of extending research activities on diarrhoeal disease control. An important constraint related to diarrhoeal disease control research is the lack of research workers interested in conducting epidemiological and operational studies. Research workers are mainly interested in laboratory-oriented studies.

3.13 Acute respiratory infections

The meeting of principal investigators in Manila in August 1982 recommended that support to the health services should be considered a priority in the area of research. The meeting also considered that sufficient technology was available and that existing acute respiratory infections projects had already provided sufficient information for countries to initiate a prevention and control programme in a phased
Guidelines for case management adapted to specific local conditions should be established and their efficacy and effectiveness evaluated through health services studies before being adopted on a national scale.

Pursuant to the above recommendation, an operational research project, the objective of which is the reduction of acute respiratory infections mortality in children under five years of age through primary health care intervention, has been started in Bohol, Philippines, with Australian Development Assistance Bureau support and WHO collaboration. The project covers the development, implementation and evaluation of a prototype acute respiratory infections intervention programme at primary level, utilizing immunization, health education and standard case management. If efficacious, the prototype will provide the basis for expansion of an acute respiratory infections prevention and control programme on a national scale.

Hospital-based and community-based studies on the etiological, clinical and epidemiological aspects of acute respiratory infections are in progress in China, Malaysia, Vanuatu and Viet Nam. The results of these studies may lead to the development of guidelines for acute respiratory infections management or identify other possible interventions that could be applied at peripheral level in these countries.

3.14 Tuberculosis

A WHO Headquarters staff member visited the Republic of Korea in November 1984 to review progress in the study on the effectiveness of BCG vaccination. He also visited Hong Kong in the same month to follow up the BCG study on newborns, which was initiated in 1978.

The National Institute of Health Department of Cellular Immunology, Japan, which is a WHO collaborating centre for tuberculosis bacteriology, has continued to receive specimens from Member States for the identification and classification of tubercle bacilli, and to conduct sensitivity tests for current drugs used in tuberculosis control.

3.15 Leprosy

The Institute for Natural Science, Nara University, in collaboration with Kyoto University, Japan, is currently undertaking research on the development of new methods for the early serodiagnosis of leprosy infection, using chemically synthesized phenolic glycolipid antigens. The Regional Office is providing financial support to the study.

Studies on the feasibility of multidrug therapy implementation for the control of leprosy are in progress in Papua New Guinea and the Philippines.

A working group on development of rapid diagnostic methods for M. leprae infection will be held in Tokyo in June/July 1985.

3.16 Viral diseases

Viral fevers

In the light of recent progress in modern biotechnology in a number of developed countries of the Region, activities during the biennium were mainly directed toward strengthening collaboration in the development of rapid diagnostic methods and
vaccines for dengue virus, Hantaan virus (the causative agent of haemorrhagic fever with renal syndrome) and Japanese encephalitis virus, based on this biotechnology.

Rapid diagnostic methods for dengue virus infection and a rapid method for isolating dengue virus by intracerebral inoculation of the mosquito larva were developed in Malaysia with technical support from WHO.

Cooperation was extended to China, Japan and the Republic of Korea for epidemiological and virological studies on Hantaan virus. More than thirty Hantaan-related viruses have been isolated. Progress has been made in research on RNA sequence analysis, and the immunological and pathogenic characterization of Hantaan virus and Hantaan-related viruses in these three countries.

The Working Group on Prevention and Control of Japanese Encephalitis, held in Tokyo in December 1983, reviewed the epidemiology of the disease and the efficacy of existing monovalent killed vaccine. The Group noted progress in the development of bivalent killed vaccine and in research on the characterization of protective antigenic determinants of Japanese encephalitis virus.

A meeting of the Working Group on Development of Vaccines for Arthropod- and Rodent-borne Viruses was held in Sendai, Japan, in August 1984. The Working Group reviewed progress in the development of vaccines and also identified constraints on the prevention and control of these diseases.

Hepatitis

Collaborative activities during the biennium were directed towards the strengthening of epidemiological surveillance, including laboratory diagnostic capability, and the development of diagnostic reagents and vaccine production in countries of the Region.

Technical and financial cooperation was provided for the strengthening of epidemiological surveillance of hepatitis B virus markers in China, Malaysia, the Philippines and the Republic of Korea.

Technical and financial cooperation was extended to China, where progress was achieved in the development of hepatitis B diagnostic reagents and plasma-derived vaccine production and in research on the preparation of hepatitis B vaccine in yeast, using the recombinant DNA technique.

Field trials of locally produced plasma-derived hepatitis B vaccine to test its efficacy in the prevention of mother-to-infant transmission of hepatitis B virus were conducted with success in China, Japan and the Republic of Korea.

Steps were also taken to develop the production of diagnostic reagents in Malaysia and the Philippines.

Among other recommendations made at its meeting in Sendai, the Task Force on Hepatitis recommended publication by WHO of regional guidelines providing information on diagnostic reagents production, and standardized laboratory procedures for detecting hepatitis markers, as well as guidelines for control programmes and vaccination strategies. Preparations are now under way for these guidelines.
3.17 Cardiovascular diseases

The Department of Medicine, University of Western Australia, Perth, was designated as a WHO Collaborating Centre for the Epidemiology of Cardiovascular Diseases. This institute and three other institutes, the Beijing Heart, Lung and Blood Vessel Research Institute, China, the Department of Community Medicine, University of Newcastle, Australia, and the Department of Community Health, University of Auckland, New Zealand, are collaborating in the WHO-coordinated project on multinational monitoring of trends and determinants in cardiovascular diseases (MONICA).

The two-year research project "An epidemiological study of cerebrovascular disease through stroke registry and case-control study on risk factors in the Republic of Korea" has entered its second year.

A research proposal was received from China on primary prevention of rheumatic fever among school children aged 7-15 in Guangzhou.

3.18 Cancer

The third general meeting of the WHO Collaborating Centre for Evaluation of Methods of Diagnosis and Treatment of Stomach Cancer was held at the National Cancer Centre, Tokyo, in July 1984.

A national workshop on gynaecological tumours was conducted at the Capital Hospital, Beijing, in December 1984. Similarly, a national workshop on oncogene isolation was held at the Beijing Institute for Cancer Research, Beijing, in March 1985.

A research proposal was received from Papua New Guinea on clinical research for oral cancer, and this was supported by the Regional Office.

4. MAJOR RECOMMENDATIONS MADE BY THE WESTERN PACIFIC ADVISORY COMMITTEE ON MEDICAL RESEARCH (WPACMR) AT ITS TENTH SESSION IN 1985

The Western Pacific Advisory Committee on Medical Research

4.1 Recommended that a small ad hoc working group should be convened to analyse the global health research policy framework in depth; to suggest amendments or additions as appropriate and also to identify useful elements of the approaches being developed by the Sub-Committee on Health Research Strategy for HFA/2000 of the global Advisory Committee on Medical Research which could be incorporated in the further development of health research strategies in the Region.

4.2 Recommended that research needs and priorities for the Region and its Member States should be re-examined in the light of the conceptual framework and approaches outlined in the draft global health research policy framework developed by the Sub-Committee on Health Research Strategy for HFA/2000 of the global Advisory Committee on Medical Research.
4.3 Recommended that efforts should be made to further support Member States in expanding the use of health systems research to address priority issues in health systems development, through:

(i) developing national capabilities to carry out health systems research, commencing with small research studies to gain experience and confidence;

(ii) stressing the importance of health systems research as an integral part of management.

4.4 Recommended that the Secretariat should expand the opportunities for exchange of information on health systems research, through:

(i) exchanges of national staff among countries or areas in the Region in order to allow staff to gain from the experience that has been accumulated in countries or areas;

(ii) improved documentation of health systems research projects (including where possible both successful and unsuccessful projects) e.g. through development of a regional bibliography of health systems research results that are not being disseminated through standard publications.

4.5 Recommended that the Secretariat should continue to actively support diarrhoeal disease research, with emphasis on the linkage of research to national diarrhoeal disease control programmes and on the development of biomedical research tools for intervention that can be applied at an affordable cost.

4.6 Recommended that oral rehydration therapy should be regarded as the main thrust to reduce mortality due to diarrhoeal diseases in the short term. Health systems research that can further this objective should be actively supported.

4.7 Recommended that certain countries should be encouraged to initiate studies on the impact and cost-effectiveness of primary preventive measures, such as improved sanitation and hygiene and child-feeding practices, for the reduction of high morbidity due to diarrhoeal diseases.

4.8 Accepted and endorsed the change in the general strategy for schistosomiasis control, with emphasis now on the reduction of morbidity rather than on the interruption of transmission, and recognizing the role of community participation in both.

4.9 Recommended that mechanisms should be established to ensure close collaboration between behavioural scientists, health research workers and health administrators in order to foster decision-linked research aimed at issues of vital concern to policy-makers and programme managers.

4.10 Recommended that the involvement of behavioural scientists in health research should be encouraged by maintaining a more active dialogue, establishing career development opportunities for social scientists in the health system including training institutions; that consideration should be given to commissioned research on priority problems; that training in social sciences should be strengthened in the basic training programmes for all categories of health personnel and efforts made to incorporate
health issues into the social sciences curricula; that attention should also be paid to
the adaptation of social sciences methodologies for application to health behavioural
issues.

4.11 Urged the Secretariat to further accelerate work on the production of newer
vaccines based on modern biotechnology in order to increase the availability of
hepatitis B vaccine at low cost and on a large scale to address the current regional
needs.

4.12 Urged the Secretariat to initiate collaborative activities between Member States
and WHO for identifying research needs in health manpower development in order to
improve health management.

4.13 Recommended that research efforts should be concentrated on fundamental
questions for optimal health manpower development such as:

- the design and testing of monitoring devices for the health manpower
development process;

- the formulation of strategies to overcome resistance to the introduction of
change into training institutions;

- the study of alternative mechanisms for coordination between training
institutions and the health services.
RESEARCH GRANTS AWARDED BY PROGRAMME AREA
As of December 1984

<table>
<thead>
<tr>
<th>Programme area</th>
<th>Amount (US$)</th>
<th>Percentage</th>
<th>No. of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health systems research</td>
<td>223 975</td>
<td>12.6</td>
<td>14</td>
</tr>
<tr>
<td>Nutrition</td>
<td>17 300</td>
<td>1.0</td>
<td>3</td>
</tr>
<tr>
<td>Oral health</td>
<td>9 671</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>Maternal and child health</td>
<td>22 989</td>
<td>1.3</td>
<td>2</td>
</tr>
<tr>
<td>Health of the elderly</td>
<td>37 300</td>
<td>2.1</td>
<td>5</td>
</tr>
<tr>
<td>Workers' health</td>
<td>11 750</td>
<td>0.7</td>
<td>3</td>
</tr>
<tr>
<td>Mental health</td>
<td>33 682</td>
<td>1.9</td>
<td>7</td>
</tr>
<tr>
<td>Environmental health</td>
<td>8 500</td>
<td>0.5</td>
<td>2</td>
</tr>
<tr>
<td>Food safety (fish poisoning)</td>
<td>15 000</td>
<td>0.8</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory technology (immunology)</td>
<td>24 390</td>
<td>1.4</td>
<td>2</td>
</tr>
<tr>
<td>Immunization (pig-bell)</td>
<td>20 000</td>
<td>1.1</td>
<td>1</td>
</tr>
<tr>
<td>Disease vector control</td>
<td>62 110</td>
<td>3.5</td>
<td>15</td>
</tr>
<tr>
<td>Malaria</td>
<td>18 800</td>
<td>1.1</td>
<td>3</td>
</tr>
<tr>
<td>Schistosomiasis</td>
<td>141 975</td>
<td>8.0</td>
<td>15</td>
</tr>
<tr>
<td>Other parasitic diseases</td>
<td>43 900</td>
<td>2.5</td>
<td>5</td>
</tr>
<tr>
<td>Diarrhoal diseases</td>
<td>243 978</td>
<td>13.8</td>
<td>13</td>
</tr>
<tr>
<td>Acute respiratory infections</td>
<td>422 667</td>
<td>23.9</td>
<td>7</td>
</tr>
<tr>
<td>Zoonoses (snakebite)</td>
<td>12 950</td>
<td>0.7</td>
<td>2</td>
</tr>
<tr>
<td>Sexually transmitted diseases</td>
<td>16 421</td>
<td>0.9</td>
<td>2</td>
</tr>
<tr>
<td>Prevention of blindness</td>
<td>29 300</td>
<td>1.6</td>
<td>1</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>101 733</td>
<td>5.7</td>
<td>8</td>
</tr>
<tr>
<td>Dengue haemorrhagic fever</td>
<td>99 470</td>
<td>5.6</td>
<td>3</td>
</tr>
<tr>
<td>Haemorrhagic fever with renal syndrome</td>
<td>79 516</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>Leprosy</td>
<td>30 000</td>
<td>1.7</td>
<td>1</td>
</tr>
<tr>
<td>Cancer</td>
<td>5 870</td>
<td>0.3</td>
<td>2</td>
</tr>
<tr>
<td>Health manpower research</td>
<td>20 600</td>
<td>1.2</td>
<td>2</td>
</tr>
<tr>
<td>Cardiovascular diseases</td>
<td>10 873</td>
<td>0.6</td>
<td>1</td>
</tr>
<tr>
<td>Traditional medicine</td>
<td>3 000</td>
<td>0.2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1 767 720</strong></td>
<td><strong>99.7</strong></td>
<td><strong>125</strong></td>
</tr>
</tbody>
</table>