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EASTERN MEDITERRANEAN ADVISORY COMMITTEE ON MEDICAL RESEARCH
SEVENTH MEETING
Nicosia, 30 August - 2 September 1982

The views expressed in this report do not necessarily reflect the official policy of the World Health Organization.

REPORT
OF THE EM ADVISORY COMMITTEE
ON MEDICAL RESEARCH
Seventh Meeting

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WORLD HEALTH ORGANIZATION
EASTERN MEDITERRANEAN REGION

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I OPENING OF THE MEETING

The Seventh Meeting of the Eastern Mediterranean Advisory Committee on Medical Research (EM/ACMR) was held in Nicosia, Cyprus, 30 August - 2 September 1982. It was attended by members of the Committee, Professor S. Bergström, Chairman of the Global ACMR, Resource Experts, WHO staff members from the Geneva Office, SEARO and EMRO. The list of participants is given in Annex I.

The meeting was opened by H.E. Dr C.C. Pelecanos, Minister of Health, Government of Cyprus. One minute's silence was observed in memory of the late Dr A.H. Taba, Director WHO/EMR. Dr Pelecanos in his address referred to the commendable work being done by the EM/ACMR within the context of the Organization's collaborative programme with its Member States, to achieve the global objective of Health for All by the Year 2000.

Dr Farouk Partow, Officer-in-Charge of the EM Regional Office, in his address thanked the Government of Cyprus for hosting the meeting and H.E. the Minister of Health, Dr C.C. Pelecanos for inaugurating this session of the EM/ACMR. He welcomed Professor Dr M. Abdussalam, the new Chairman and other new members of the Committee. In his address Dr Partow briefly touched on the various items included in the Agenda for the meeting, and looked forward to the Committee's continuing guidance in the development of the Regional Research Programme. The full text of Dr Partow's address is given in Annex II.

Election of Officers

The Committee elected the following Officers:

Vice-Chairman	Dr Ibrahim Badran President Academy of Scientific Research and Technology Cairo
Rapporteur	Dr Amin A.A. Nasher Deputy Minister of Public Health Ministry of Health Aden

II ADOPTION OF AGENDA

The revised Provisional Agenda, placed before the Committee, was adopted and is given in Annex III.

III AGENDA ITEM 4/A - REPORT ON THE HEALTH COVERAGE WORKSHOP ISLAMABAD, 26 MAY - 2 JUNE 1982

In the light of the recommendations of the Sixth Meeting of the EM/ACMR, regarding promotion of Health Coverage Studies in Member States, a Health Coverage Workshop was held at the National Institute of Health, Islamabad, Pakistan, from 26 May to 2 June 1982, under the auspices of the Pakistan Medical Research Council (PMRC).

The objectives of the Workshop were:

- to sensitize participants to (a) the aim, (b) the methods, and (c) the challenges of Health Services Research (HSR) with a coverage problem focus;
- to develop a research proposal for conducting a Health Coverage Study in Pakistan.

The workshop was attended by twelve participants of whom nine were senior public health physicians and three biostatisticians with experience in the health field. Three of the participating physicians and two statisticians had had substantial experience in health research in Pakistan.

A draft Instructional Manual for Implementing Health Coverage Projects in Developing Countries, which was developed as a result of the experience gained in the Three-Country Coverage Study, served as the main learning resource for the Workshop. Some of the subjects covered through individual presentations and which made use of the Instructional Manual included: sampling strategies and

statistical testing, formulation of hypotheses and advantages and types of data yielded by sociological, epidemiological and ethnographic research methods, issues in instrument design, pilot testing and implementation, and training and managerial requirements for carrying out a Coverage Study.

Based on the experience gained during the Workshop it was apparent that the Draft "Instructional Manual for Implementing Health Coverage Projects in Developing Countries" would need to be revised in order to render it more suitable for utilization in future workshops such as this.

A major output of the Workshop was the formulation by the participants of a draft proposal for a Health Coverage Study in Rural areas of Pakistan. The objective of the proposed study was to assess the strong and weak areas of the integrated rural health system being developed, with a view to suggesting measures for improving its effectiveness in meeting the health needs and aspirations of the people.

An evaluation of the Workshop indicated that most of the participants had gained new knowledge in HSR, as well as skills in development of research proposals; they liked the informal nature of the course, and appreciated the instructional methods used. They also expressed an interest in participating in HSR projects.

A major factor contributing to the success of the Workshop was the existence of a positive relationship and cooperation between the Ministry of Health and the PMRC. This augurs very well for the future development of Health Services Research in Pakistan.

The Committee was informed that the model employed for the type of coverage study envisaged was an expandable diagnostic instrument which can be used to assess the availability, accessibility and utilization of the existing health services directed to one or more target groups of the community. The emphasis was on studying the interface between the utilizers and providers of health services. It was designed to yield necessary qualitative and quantitative data in the shortest time possible and at the least cost, using available resources in the health system and the community.

The Committee felt that the leadership for health services research should rest with the countries themselves with minimal inputs from WHO.

The Committee recommended that the draft Manual prepared to assist investigators in undertaking health coverage studies be finalized and published by WHO for distribution in the Region. The Committee also recommended that such workshops be held in other countries of the Region adapted to the needs of each country concerned.

IV AGENDA ITEM 4/B - RESEARCH IN PRIMARY HEALTH CARE

The working paper EM/7TH.MTG.ACMR/5 was introduced by Dr A. Robertson, Director of Strengthening of Health Services, EMRO.

Since the Regional Research Programme began and in accordance with the advice of the EM/ACMR, Health Services Research (HSR) has been accorded high priority. In 1981, at its meeting in Islamabad, the Committee had looked in some depth at some areas of health services and manpower development (HSMD), where research may play an important role. However, the response in terms of increased research activities in the countries of the Region has not been as good as might have been anticipated. Among the reasons for this may be:

- Lack of understanding among potential research workers about what constitutes HSMD;
- Insufficient people confident of their ability to develop research protocols and undertake research;
- WHO's approach to wait for proposals to be submitted may not be appropriate in such a relatively new field of research.

Because of the important contribution of HSR to the achievement of Health for All by the Year 2000, it is considered that a new look needs to be taken at this issue, with PHC as its essential feature. It is considered appropriate to establish a set of criteria based on the classic eight elements of PHC, as laid down in the Declaration of Alma Ata. A clear objective picture of the state of PHC in any one country in the Region is not easily obtainable even though some fifteen countries now have established PHC programmes.

Furthermore, while there has been some reorientation of health personnel education and manpower development to foster PHC approaches, in no country in the Region has this been broad or deep enough. Some countries have begun training PHC personnel under different names, e.g. community health workers, and some experimental medical curricular changes and innovations have taken place, such as those at the University of Gezira, Sudan. A number of short courses and seminars have been held for school teachers, local healers and traditional birth attendants; but there is a long way to go, in the face of various barriers which need to be overcome, in the development and deployment of appropriately proposed PHC manpower.

If existing health systems develop to include community participation and community initiatives as an equal and integral part of their modus operandi, health problems may be better solved and health needs better met. This requires a change of attitudes among decision-makers, politicians, health administrators and health professionals. If "HFA/2000 through PHC" is to be achieved, there must be overall consistency between the objectives of health care, the strategies and methods to achieve these objectives, and the priorities for health care research. HSR could be directed towards finding better approaches towards the organization development and financing of health care systems, utilizing existing resources.

Another important role of research in PHC is its catalytic and promotional function among individuals, communities and countries. Research always leaves some impact on the site where it takes place.

The following criteria, based on the elements of PHC spelt out in the Alma Ata Declaration, have been developed to establish priorities for research:

- Seek to prevent disease and promote healthy living with special emphasis on education for health.
- Be directly related to implementing declared approaches to promoting at least one of the eight specific elements of primary health care.
- Aim at the development of primary health care systems which are consistent with and utilize existing community resources, and which adopt/adapt existing technologies including traditional systems.

- Aim at the development of systems of care which involve people and communities designing and developing their own services, incorporating principles of self-reliance (and self-satisfaction).
- Seek solutions to health problems which are economically feasible and which are consistent with the overall social and economic development of the community and/or country.
- Use methodologies which are valid and appropriate for the purposes of the research, incorporating appropriate design and data analysis procedures.
- The research must be capable of being accomplished within a short time (up to 2 years) and at a cost within the funds available to the country.
- Make sure of the skills of an appropriately trained team of behavioural/ social scientists, educators, economists, lawyers and others where appropriate, in collaboration with personnel responsible for health care delivery.
- Have a training component so that potential primary health care research workers and investigators may be taught in practical ways the research skills appropriate for primary health care investigations.

These criteria may be reviewed in relation to national priorities in each country . Alternatively, a research project may be requested to fulfil at least five of these criteria before it is eligible for support.

PHC research may be classified as developmental or technical and descriptive or prescriptive. PHC research of the developmental prescriptive variety is probably the most important. It is also likely that such research should be small scale and innovative, not being expected to comply with every detailed aspect of the scientific rigor traditional in classical experiments.

Three priority areas have been identified for PHC research and these are:

- (i) The development of research initiatives in the organization of health care.

At the hub of developing alternative approaches is the need to get total community involvement in the definition of health care needs and the design and delivery of services. With the basic health centre or unit in the village

as the focal point, there must be two-way cooperation between this unit and other community activities, including religious education, agricultural, industrial and other environmental groups, along with the local health and/or development council. It is clear that health-professional-controlled initiatives were not leading to permanent improvements in health. Newer approaches are needed leading to the community both participating and being responsible for its own health. We need to know how to do this efficiently and effectively.

(ii) Continuing education of all types and levels of health personnel overlaps with both the basic training of health personnel and the education of the community. The Region has already made advances in developing medical education with community education interaction. Such advances have taken place at Suez Canal University, Egypt; Ben Gurion University, of the Negev, Israel, and the University of Gezira, Sudan. Each continuing education research project should address itself to answering questions about:

- Who the education might be for and with what priority;
- What incentives are useful to make it happen, paying special attention to career development;
- Who will organize and carry out the continuing education activities, health service leadership with health personnel participation or vice-versa ;
- What approaches should be taken, human, developmental or technological; and consideration of keeping continuing education costs within available financial resources;

Finally, continuing education must be relevant to community health needs.

(iii) It is clear and desirable for health initiatives to contribute to the social and economic development of the community and that adequate health care will only come about with communication and cooperation between the many sectors involved. Too many vertical programmes, stemming not only from various

sections of the health service but also from other governmental sectors, clash and confuse communities and each other. Ways need to be found to promote inter-sectoral activity directed to a harmonious working relationship in matters of health and well-being at local, provincial and country level. A series of questions needs to be answered about how cooperation between sectors begins, how it spreads and how it can become permanent.

Three mechanisms for the promotion of PHC research in EMRO were suggested:

- 1) For EMRO to develop descriptive outlines of topics requiring research, in sufficient detail to inform governments and research institutes of the size and scope of the desired research;
- 2) Setting-up of an EMR Task Force in PHC research to include WHO staff members and EM/ACMR members to visit countries for individual consultations and workshops;
- 3) To provide funds direct to countries to use on PHC topics of their own choosing, methodological assistance being offered when and where needed.

On the invitation of the Chairman, Dr B.A. Jayaweera, Chief, Medical Research, SEARO, presented a brief summary of development in research focused on HFA/2000 in the South East Asia Region. The background information document circulated* was an outcome of the deliberations of the South East Asia ACMR (SEA/ACMR).

The Committee was informed that in the early years, determination of regional research priorities had been based primarily on the aggregate morbidity and mortality indices of Member Countries. With the commitments of Member Countries and the Organization to the goal of HFA/2000 with PHC as the key approach, there was a need for gearing research efforts towards this. In this

* Research Needs for Health for All by the Year 2000.

context the scope of research began to be widened and went beyond the limits of conventional institutions to involve multi-disciplinary teams and inter-sectoral actions. Institutions which hitherto had not been exploited in the so-called medical research programmes, needed to be involved more. Hence it was felt that the Regional Research Programme should develop guidelines and criteria to provide an overall direction.

The content of such a programme had to be derived from the research requirements of the national strategies for HFA/2000 and research commonalities of such national strategies could form the content of the Regional Research Programme.

In this context, referring to the background paper EM/7TH.MTG.ACMR/5, it was pointed out that the three broad areas suggested in the paper were also of concern to the South-East Asia Region.

With reference to Health Services Research, a major constraint was the lack of a clear understanding of what was meant by HSR among policy-makers and administrators as well as the multi-disciplinary groups of scientists who should concern themselves with this type of research. The South East Asia Region, while adopting the definition of Health Service Research developed by the Global ACMR Sub-Committee on HSR^{*} felt that a conceptual description of the health services research would help clarify HSR. Therefore a descriptive document on "the concept of HSR" had been developed for wide circulation in the Region.

From a survey done on a sample of Member Countries of the South East Asia on HSR it transpired that the countries were doing health services research on their own, a good part of which related to HFA/2000 and PHC. The SEAR/ACMR suggested that, rather than developing a regional programme de novo, it would be advisable to make a more detailed study of the health services research status in the SEAR countries. Therefore, Member Governments are now themselves looking into their own studies done so far, as well as those ongoing.

* Report of the Second Session of the Global ACMR Sub-Committee on Health Services Research, Alexandria, 26-29 June 1979, (ACMR/HSR.2/79 Report)

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When this information has been collected and compiled by the end of 1982, it will be possible to identify lacunae in the national strategies where national and regional action could be promoted by WHO.

In addition to the above, an attempt is being made through the library network and the HSR focal points in the Member Countries to classify this literature in an appropriate manner and to index them at the national level so that exchange of information within and outside Member Countries of the SEA Region could be more effective.

The Committee in its discussion felt that the concept of PHC must be operationalized and PHC research considered a country level activity. These were major themes around which much of the Committee's discussions revolved.

Clear recognition was given to the need to reorient, motivate and convince clinicians, health academics and administrators about the need and importance of PHC research. In particular, attitudes need to be changed but carefully avoiding counterproductivity and antagonism. The obstacles to accepting PHC by established health personnel groups needs to be clearly seen, so that continuing education of health professionals may be planned. However, it has to be recognized that PHC is still seen as a vague concept which requires closer definition to facilitate this education.

The Committee recommended that utilizing the criteria and approaches mentioned above, the Regional Office should take steps to develop research especially in the three priority topics. In this connection it was also recommended that a "task force" of the EM/ACMR be set up to advise on and foster PHC research in the Region. This body should have a clear linkage and should collaborate with the newly established Regional Office working group on PHC, in order to implement research, taking care not to become a report-producing outfit but to actively help countries in implementing research.

This mechanism may operate by assisting in the formulation of research objectives, developing protocols and allocating seed monies. It was agreed that nationals must play the central role in defining what research was needed and in conducting it.

Baseline data are necessary to evaluate both short-term and long-term progress in achieving HFA/2000 through PHC. The selection of appropriate indicators by countries to monitor their progress was considered important. An example was suggested: the Blue Nile Project to be evaluated by the staff and students of the Universities in Sudan, in collaboration with the health services. The benefit of this approach would not only be to monitor that project but also to orient and train health academics and their students. The task force may assist in country evaluation by working with national PHC research and evaluation teams and by producing evaluation guidelines, which take into account those drawn up by WHO. It was suggested that these country teams of nationals be multidisciplinary in their composition. They would act as a critical mass to promote and initiate PHC activities in the country. A member of this national team may act as a correspondent to EMRO and to the EM/ACMR, providing information on progress.

The Committee endorsed the need to focus research on community participation. It was suggested that the community structure used to promote and direct health should be so composed that it would include other community development activities in its mandate. Intersectoral collaboration at community level needed investigation. The role of the community health workers, mechanisms for his supervision and systems of referral are areas requiring careful study.

Research initiatives are needed to get PHC into the education of all health personnel, especially medical education. Due recognition was given to the fact that some activities of this type had already begun.

The activities of the Global ACMR in HSR were briefly presented and discussed. A strong appeal was made for close coordination of global and regional activities in this field. The countries themselves should be encouraged to take the lead in their own PHC research. The value of bilateral

finance and manpower to help research was recognized but it was realised that such activities require coordination at regional level.

V AGENDA ITEM 5 - REGIONAL RESEARCH PROGRAMME IN CARDIOVASCULAR DISEASES(CVD).

Even though accurate information on the prevalence and incidence of various forms of heart diseases was generally lacking in most countries of the Region, it was felt that CVDs were fast emerging as a major health problem in the majority of developing countries.

During 1981 the Regional Office had made an attempt to collect information on the size of the problem posed by CVDs in selected countries of the Region, i.e. Cyprus, Egypt, Israel, Pakistan, Sudan and Tunisia. On the basis of information thus collected, it appeared that Rheumatic Fever (RF) and Rheumatic Heart Disease (RHD) are still widely prevalent. Hypertension (HT) was present in 10-20% of adults in different population groups and Ischaemic Heart Disease (IHD) is being seen with increasing frequency. Expertise in clinical cardiology was widely available in the Region, together with variable levels of diagnostic and therapeutic facilities. However, skills and interest in cardiovascular epidemiology and community control are almost non-existent.

To supplement the information collected as above, and in order to obtain a better idea of the research in CVD carried out in the Region, a MEDLARS search was carried out for articles emanating from the above countries and published during the last 10 years. With the exception of Israel, where research covering a broad spectrum of topics has been undertaken, most of the published articles, dealt with reports of surveys to determine prevalence of various forms of Heart Disease in selected population groups. In addition, there were papers describing clinical and pathological data on a series of cases or single case reports. Yet, some other articles reported haemodynamic findings or experience with new diagnostic techniques. There were very few studies aimed at clarifying pathogenic mechanisms in various forms of CVDs. Except from Israel, there were no reported findings on experiences with control of CVD in the community.

The CVD research programme, coordinated from the CVD Unit in WHO Geneva, was also presented (Doc. EM/7TH.MTG.ACMR/6(a)) and briefly reviewed in relation to the Regional Programme. It was noted that the scope of the projects undertaken and their geographical distribution over the past decade were, to a large extent, a reflection of the type of priority that had been given to CVD research at national and regional levels. For example, although countries in the EMR did not figure prominently in the activities as a whole, yet, in the specific project area of RF and RHD, 4 of the 12 participating centres were from this Region alone.

In general, the type of research favoured by WHO is a combination of epidemiological research and population-based intervention studies for the prevention and control of CVDs. This approach is fundamental to WHO-inspired or WHO-collaborative projects in both developed and developing countries.

In particular, there are 4 project areas that have special relevance to countries in the Region:

(i) Community Control of HT

There is evidence that the control of HT will reduce the incidence of stroke by 30% and that lowering the population mean diastolic blood pressure by 2 mmHg will reduce the incidence of coronary heart diseases (CHD) in the 40-59 age groups by 5%. The WHO collaborative studies and several others have established the feasibility of the population approach to HT control. What is needed now are action programmes with built-in operational research components to determine the most appropriate method in a given community situation.

(ii) Community Control of RF and RHD

The feasibility of secondary prevention of RHD in the community has also been established and the report of the WHO collaborative studies was published in 1979. It is estimated that the cost of this activity is about \$ 15 per head per annum and here again the need is for operational research as part of action programmes. Following an appeal by Dr H. Mahler, Director General of WHO, the International Society and Federation of Cardiology (ISFC)

has established a special international committee to look into the problem of the prevention of RF/RHD in developing countries.

(iii) Comprehensive Cardiovascular Community Control Programme (CCCCP)

The comprehensiveness of these projects vary. In centres in developing countries the activities are usually limited to HT and/or RF/RHD prevention and control. For the future, the thrust of the CCCCCP activity in developing countries will be to develop a methodology of integrating CVD prevention and control measures into primary health care.

(iv) Primordial Prevention of CVD in developing countries

In concept, primordial prevention aims to inhibit the emergence and spread of risk factors in the community at large; its focus of action is at the political, socio-economic and cultural levels to promote healthy patterns of behaviour and life style. CVDs are emerging as a serious public health problem in the Region and will become more pressing as infectious diseases are brought under control and life expectancy at birth improves. The CVD Unit in Geneva is planning a small task force meeting to consider long-term strategies and approaches to the important and difficult question of the primordial prevention of CVD in developing countries.

In view of the above-mentioned situation, it was felt that in the coming years, the main emphasis of research should be on facilitating the planning and implementation of community-based prevention and control programmes and on training cardiologists and other public health-oriented physicians in relevant CVD epidemiology and community control skills. Where facilities and expertise exist, and subject to availability of resources, support may also be provided for research in the pathogenesis and treatment of major CVDs.

The Committee endorsed the proposed topics for research and recommended that they be prioritized as under:

- Development and testing of standard programmes for the detection, treatment and follow-up of patients suffering from HT in primary health care settings;
- social and behavioural studies to improve compliance with antihypertensive treatment;
- definition of risk factors for IHD;
- precursors of atherosclerosis and HT in children;
- studies on thrombogenesis;
- estimation of salt intake in different age and population groups and its role in pathogenesis of HT;
- studies on dietary intake of fats by different social and economic groups and the effect of these fats on various fractions of blood lipids.

The Committee, while appreciating the need for epidemiological studies/surveys to establish bench-mark data and for monitoring and evaluating the impact of intervention studies, felt that exhaustive resources should not be deployed for this purpose, and recommended that wherever possible "short-cut techniques" should be utilized, e.g. using a sample as small as statistically acceptable and a questionnaire dealing with only the essentials as well as the increasing use of opinion surveys.

The Committee suggested that the existing health personnel including cardiologists and others, should be utilized for undertaking various epidemiological and community-based control projects. In addition, it was recommended that the Regional Office provide assistance to interested countries in helping develop protocols for such studies.

In order to provide the necessary sustained leadership role in countries where several research studies are being planned, an appropriate institute or department of cardiology may be selected in consultation with national authorities and provided with sustained support to fulfill this role. This strengthening will be mostly in the field of epidemiology and community control and to a much lesser extent in the purely clinical and basic sciences areas.

The WHO mechanisms for fellowships, research grants and research training awards and other modes of technical collaboration will be utilized to support the various activities proposed under this programme.

VI AGENDA ITEM 6 - PROGRESS REPORT ON RESEARCH ACTIVITIES IN DIARRHOEAL DISEASES

A progress report on research activities in Diarrhoeal Diseases was presented. The Committee was informed about the regional efforts made to achieve linkage between the health service delivery and the research components of the Regional Programme. In general, the research component of the Regional Diarrhoeal Diseases Control Programme is oriented towards addressing problems which may be encountered in the planning, implementation or evaluation of the national Diarrhoeal Disease Control programmes.

The Committee was informed about the approaches adopted by the Regional Office in order to achieve this linkage. These included the identification of research needs at the time of programme formulation followed by efforts to stimulate submission of proposals to cover these areas.

One of the approaches adopted and found to be most useful was to convene national meetings in which research workers and national administrators responsible for Diarrhoeal Disease Control collaborated to formulate research proposals related to the immediate needs of the national programmes. The Committee commended this approach and recommended that the Regional Office continues its efforts and take necessary steps to assist national scientists in developing and implementing research projects relevant to the needs of the national Diarrhoeal Disease Control programmes.

The Committee was also informed of the progress in the WHO-supported Diarrhoeal Disease research projects in the Region and of the forthcoming

meeting of the Regional Scientific Working Group on Diarrhoeal Diseases Research. The Committee suggested that the RSWG be advised to place a greater emphasis on developing community based studies, particularly in anticipation of the availability of new vaccines and other tasks that would be useful in the prevention and control of Diarrhoeal Diseases.

VII AGENDA ITEM 7 - REVIEW OF RESEARCH ACTIVITIES IN THE BLUE NILE HEALTH PROJECT

The vast expansion of tropical water development schemes for irrigation and hydroelectric energy has added a new dimension to existing problems in prevention and control of vector-borne diseases, such as malaria and schistosomiasis. These diseases have caused mortality, and severe morbidity among agricultural populations resulting in decreased agricultural productivity plus the financial burden of treatment of patients. The need for effective prevention and control of these diseases in water resource developments is becoming urgent. Thus, the Blue Nile Health Project is providing the opportunity to develop a comprehensive strategy for prevention and control of vector-borne diseases in water resource development schemes, using a combination of operational research and cost-impact assessment.

The Blue Nile Health Project was started in 1979 to control the major diseases associated with irrigation along the Blue Nile River in the Sudan: i.e. malaria, diarrhoea and schistosomiasis. For the 2 million inhabitants of the agricultural communities involved, the increase in severe cases of S. mansoni infections, the incipient seasonal epidemics of falciparum malaria and the persistently high death rates from diarrhoeal diseases in children gave real urgency to the project. Thus, its programme, covering 3 operational zones, was quickly established within the second year of operation. In 1981 malaria was under control in all 3 zones, and schistosome transmission had been completely prevented through treatment of cases and application of focal

molluscicide in the zone of the newly established Rahad irrigation scheme with a population of 80 000. A year of baseline data on all 3 diseases has been collected from the Study Zone wherein careful evaluation is now being made of the proposed Comprehensive Strategy, eventually to be applied to the larger Gezira-Managil Zone.

Many of the control methods used against one water-associated disease are also effective against the others, e.g. provision of safe drinking water, which is mainly directed towards prevention of water-borne diseases, can also prevent schistosomiasis by reducing human contact with infected water. In the Blue Nile Health Project, the multiple benefits of control measures are being utilized to the fullest extent to increase cost effectiveness.

Efforts are being exerted in the Project to replace chemical control of mosquitoes and snails by alternatives such as environmental and biological control measures, improvements in basic health services, permanent modifications in agricultural and domestic water-use and by changes in human behaviour, all of which are long-lasting, economical and safer for the environment. By replacing or decreasing the use of imported insecticides which may become ineffective due to development of resistance by the vector, and drugs, with alternative measures, significant savings will occur in scarce hard currency. Development of these alternative control measures requires extensive research activities in the Project.

Therefore, research in the Blue Nile Health Project is diverse and has high priority. The project also provides a suitable training facility for scientists interested in the control of water-associated diseases.

By the end of 1981, 14 major research topics were under investigation by project staff in cooperation with students and faculty from the Universities of Khartoum and Gezira, as well as the Ministry of Irrigation (See Annex IV).

The topics are aimed at several measures for snail and mosquito control, at definition of the transmission patterns of schistosomiasis and at measuring the economic impact of the water-borne diseases on agricultural communities.

So far, preventing transmission of schistosomiasis in the Rahad Zone by the application of integrated control measures is the most significant accomplishment which can be applied in other newly-established irrigation schemes threatened by this disease. Equally, the results of research and field trials carried out by the Blue Nile Health Project can be utilized in other vector-borne disease control projects.

In order to orient and train project staff in the social and economic research aspects of schistosomiasis and malaria, a Course on Health Services Research and Tropical Diseases was held in March 1982, with financial support from WHO/TDR. The Course was attended by scientists from various collaborating institutes, including the Universities of Khartoum and Gezira. During the Course 3 research projects were formulated by the participants. These dealt with the impact of schistosomiasis and malaria on agricultural productivity, factors affecting utilization of health services by selected sedentary and migrant groups in Gezira, and the effect of health education and community participation on decreasing dependence on molluscicides and insecticides in the control of schistosomiasis and malaria.

The Committee was informed that it has been found possible to raise the two biological agents imported in Sudan, i.e. Chinese carp ctenopharyngodon idella, and the ampullarid snail marisa cornuarietis under the local prevailing conditions.

The Bacillusthurigiensis H-14, being a larvicide, is not practical as the only control measure in an extensive irrigation system. Nevertheless, field trials on effectiveness and cost impact of this bio-insecticide are being organized in the project.

It appears that only a small proportion of fevers of unknown origin were due to malaria, a large majority were due to as yet unidentified agents, possibly viruses.

In view of the important nature of the project the Committee was keen that adequate steps be taken, including provision of support by the Government of Sudan, to ensure that the project activities are continued when foreign assistance for the project has ceased.

In this connection the Committee felt that activities aimed at promoting community participation should be stepped up, so that ultimately the community concerned would be in a position to contribute substantially to financing, and supporting the project activities.

The Committee was informed that the project staff was fully cognizant of the problem of diarrhoeal diseases, and activities aimed at reducing mortality due to these diseases have already started and will be intensified. The Committee believed that the Project afforded a unique opportunity for evaluating the impact of provision of water supply and other sanitary measures on the incidence of diarrhoeal diseases.

In view of the significant scientific progress being made in the Project, it was proposed that scientific publications relating to the Project and reports of visiting consultants should be regularly distributed to EM/ACMR members.

The Committee strongly supported the research activities of this important health development project and recommended that a greater emphasis than hitherto be placed on developing research in community participation aspects of the Project.

VIII AGENDA ITEM 8 - REVIEW OF THE REGIONAL MEDIUM-TERM PROGRAMME FOR
RESEARCH PROMOTION AND DEVELOPMENT, 1984-1989
and
AGENDA ITEM 10 - DISCUSSION ON NEW INITIATIVES FOR PROMOTION AND
DEVELOPMENT OF RESEARCH ACTIVITIES IN THE REGION

As the above two Agenda items were closely related, the Committee decided to consider them together.

Dr Farouk Partow, Officer-in-Charge, briefly described the planning process in WHO. Plans are made on a six-year basis and the World Health Assembly at its last session had approved the Seventh General Programme of Work (GPW) covering the period 1984-1989. The Medium-term Programme (MTP) aims at elaborating the broad objectives mentioned in the GPW into targets and specific activities aimed at achieving those targets. It also delineates the approaches and the managerial process to be used in implementing the proposed activities.

The MTP was essentially a working tool for the Organization to monitor the various programmes and is constantly subject to review and revision in the light of the experience gained.

A brief review of the major RPD activities which had taken place at the recommendation of the EM/ACMR was presented to the Committee. Health research in most of the countries of the Region has been given a rather low priority and often research activities are in isolation from national health development plans. The MTP proposed for the period 1984-1989 attempts at rectifying the existing situation.

The Committee endorsed the targets given in the basic document EM/7TH.MTG.ACMR/9. In the section on approaches, the Committee proposed that development of health literature services and exchange of research information be included with a high priority.

In the section dealing with evaluation and indicators, it was suggested to include the estimates of funds obtained through extra budgetary resources for research initially funded through WHO. This would give an idea of the extent to which WHO support for research has played a catalytic role in the country.

The Committee endorsed the various activities proposed for strengthening the research capabilities of Member States, with the exception of the development of guidelines for evaluating the effectiveness of health research councils and analogous bodies. It was felt that at this stage it may be nonappropriate to collect information from research councils and analogous bodies wherever they existed in the Region, on their mechanisms for evaluating their programmes and disseminate this information within the Region. The guidelines based on this information could be prepared during the next GPW.

Dr B.A. Jayaweera, Chief Medical Research, SEARO, briefly described SEARO's experience in convening meetings of the heads of research councils with the responsible officers for health research in the ministries of health. These meetings were highly productive and were of great assistance to countries in the SEA Region in outlining their research policies and priorities and in developing pragmatic mechanisms for managing research. The Committee was informed that a similar meeting, planned earlier, is now going to be held soon.

Dr Partow expressed the readiness of EMRO to collaborate closely with countries in formulating their national research policies and priorities and in up-grading national research management mechanisms. As a follow-up to the Regional Workshop in Research Management held last year, a national Workshop is planned to be held in Egypt at the end of this year.

The Committee expressed its concern about the state of development of health literature services in countries of the Region. As mentioned under Agenda item 9

it was recommended that a small group be established to examine the situation in the Region, and to make recommendations for further development, and that this subject be included in the agenda of the next meeting.

Some of the Committee members proposed that WHO should consider producing and publishing a regional health journal. It was agreed that this proposal be examined by the ad hoc group on health literature services, with a view to ascertaining its usefulness and feasibility, taking into consideration the already existing journals.

The Committee proposed that all available mechanisms in WHO be utilized for strengthening the research and training capabilities of national institutions in the Region, including the establishment of regional centres such as the existing Mediterranean Zoonosis Centre in which 4 countries of the Region are already participating.

IX AGENDA ITEM 9 - SUGGESTIONS FOR FURTHER FACILITATING THE WORK OF THE
EM/ACMR

The Committee reviewed past recommendations made in 1977, regarding its method of work and in view of the experience since then, made certain suggestions for its future meetings.

It was felt that the Committee should continue to meet annually, and revert to holding its meetings in Spring. The next meeting should be held in Spring 1983.

The Committee expressed its satisfaction with the documentation prepared for its meetings and suggested that selected working papers prepared for the meetings be distributed to national scientists in relevant fields, for their information.

Regarding the agenda for its meeting, the Committee recommended that the regional research activities sponsored by the two WHO Special Programmes* should be discussed in alternate years. In addition, the agenda should include reviews of those research programmes where substantial progress has been made. It was felt that the Committee should also be informed of the difficulties encountered in developing satisfactory research components.

The Committee recommended that a review of regional research activities in Cancer Control be included in the Agenda for its next meeting.

It was agreed that, whenever possible and depending upon their availability the Committee members should be closely associated in the preparation of working papers and/or review of research activities in programmes related to their field of interest.

So far, the EM/ACMR had not established any sub-committees. However, it was felt that should needs dictate, sub-committees may be set up to carry out specific tasks. In view of the concern expressed at this meeting about the subject of health literature services, it was considered worthwhile to set up a small ad hoc group to examine the current situation in the Region and make recommendations for the further development of health literature services, and to present a report at the next meeting of the EM/ACMR.

It was appreciated that it was not possible for all the major areas and disciplines to be represented on the Committee. However, it was recommended that in view of the importance of the subjects, expertise in the field of behavioural sciences, health economics and environmental control be represented on the Committee through new or additional members and/or in the form of resource experts.

* i.e. Special Programme for Research and Training in Tropical Diseases (TDR) and the Special Programme for Research Development and Research Training in Human Reproduction (HRP).

X AGENDA ITEM 11 - REVIEW OF THE RECENT ACTIVITIES OF THE GLOBAL ACMR

This agenda item was introduced by Professor S. Bergström, Chairman of the Global ACMR. He briefly described the set-up and functioning of the Global ACMR and referred to the close relationship that existed between the Regional and the Global ACMRs. Professor Bergström briefed the Committee on the deliberations of the last meeting of the Global ACMR, held in October 1981, and the work done since then by its various sub-committees.

He referred to the very useful information services being provided by the WHO Special Programmes for Research in Tropical Diseases (TDR) and Diarrhoeal Diseases (CDD), and recommended that the Committee members should be on the mailing list of the Newsletters being brought out by these two Programmes. He further suggested that they should also receive the Annual Reports of these Programmes and especially a printout of all their projects in this Region. He felt that it was important that the members should follow these substantial research efforts of WHO which are dependent on voluntary contributions from Member States and other agencies. Professor Bergström also stressed that the Regional ACMR should strive to help formulate well-designed and concrete research programmes, a prerequisite for increasing the resources for research on health problems of the countries in the Region.

XI SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

1. National Workshops, aimed at developing protocols for studying health coverage should continue to be promoted and supported in the Region.
2. The draft Manual to assist investigators to undertake Health Coverage Studies should be finalized and published by WHO for wide distribution.
3. Using the criteria and approaches recommended by the EM/ACMR, the Regional Office should take steps to develop and implement research in the three priority topics identified in PHC, namely: (i) organization of health care, (ii) continuing education and (iii) inter-sectoral approaches to, collaboration in, PHC.

4. A "Task-Force" should be established to advise and foster PHC research in the Region. This group should work closely with the recently established Regional Office Working Group on PHC.
5. Research Councils, Universities and other health institutions should be encouraged and supported in developing appropriate and feasible indicators to monitor progress towards achieving HFA/2000, using a basis already laid down by WHO.
6. The Regional Research Programme in CVD proposed by the Secretariat was endorsed and the Committee identified and recommended priority topics for research in this field. It was further recommended that WHO should collaborate with countries in developing protocols in the identified priority topics.
7. The Committee expressed its satisfaction at the progress of the Diarrhoeal Diseases Research Programme and recommended that the Regional Office continue its efforts, to assist national scientists in formulating and implementing research projects.
8. The Committee expressed its strong support for the research activities of the Blue Nile Health project, and recommended that due emphasis be placed on developing research in community participation aspects of the project.
9. The Committee welcomed the MTP for RPD covering the period of the 7th GPW, and offered a number of minor modifications.
10. It was recommended that a small ad hoc working group be convened to review the situation regarding Health Literature Services in the Region and to present its report at the next meeting of the EM/ACMR

11. The Committee reviewed the working and timing of its meetings and made certain suggestions for its future work. It was recommended that its annual meetings should in future take place in the spring, starting from the spring of 1983.

12. At the next meeting a review of the Regional Research Programme in Cancer should be included in the Agenda.

13. Names of Committee members should be placed on the mailing list of the newsletters issued by the WHO/TDR and CDD Programmes and they should receive relevant information on the activities of these two Programmes.

ANNEX I

LIST OF PARTICIPANTS

COMMITTEE MEMBERS

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University of Jordan
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Academy of Scientific Research and Technology
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Major General M.I. Burney
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Professor of Pathology
King Feisal University
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Dr Bashir Hamad
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Wad Medani
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* Did not attend

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Major General M.A.Z. Mohyidin
Chairman of the Pakistan Medical
Research Council
Director of Medicine
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Dr N. Mourali
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RESOURCE EXPERTS

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American University of Beirut
Beirut
LEBANON

Mr C. Vakis
Director General
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* Did not attend

WHO SECRETARIAT

Dr Farouk Partow	Officer-in-Charge and Director, Programme Management	Eastern Mediterranean Regional Office
Dr Alexander Robertson	Director Strengthening of Health Services	Eastern Mediterranean Regional Office
Dr B.A. Jayaweera	Chief, Research Promotion, and Development	Regional Office for South-East Asia
Dr J. Hashmi	Regional Adviser, Non- Communicable Diseases and Research Promotion and Development Secretary of the Meeting	Eastern Mediterranean Regional Office
Dr M.H. Wahdan	Regional Adviser, Epidemiological Surveillance of Communicable Diseases	Eastern Mediterranean Regional Office
Dr S.R.A. Dodu [*]	Medical Officer, Cardiovascular Diseases Unit	WHO Geneva
Dr D.Rex Billington	Regional Adviser Educational Development and Support	Eastern Mediterranean Regional Office
Dr B. Tomic	Regional Adviser Community Health	Eastern Mediterranean Regional Office
Mr R. Bahar	Regional Adviser, Vector Biology and Control	Eastern Mediterranean Regional Office
Dr R.W. Jobin	Senior Sanitary Engineer	Blue Nile Health Project, Khartoum

* also on behalf of Research Promotion
and Development Unit

WHO Geneva

CONFERENCE SERVICES

Mrs C. Cartoudis-Démétrio	Conference Officer	Eastern Mediterranean Regional Office,
Mrs C. Putnoky	Secretary	Eastern Mediterranean Regional Office,
Mrs S. Ahmed	Secretary	Eastern Mediterranean Regional Office,

ANNEX II

ADDRESS OF DR FAROUK PARTOW
OFFICER-IN-CHARGE
WHO EASTERN MEDITERRANEAN REGION

at the
SEVENTH MEETING OF THE EASTERN MEDITERRANEAN
ADVISORY COMMITTEE ON MEDICAL RESEARCH
Nicosia, 30 August - 2 September 1982

Your Excellency, Members of the EM/ACMR, Distinguished Guests,
Colleagues, Ladies and Gentlemen,

It gives me great pleasure to welcome you at the 7th annual meeting of the Eastern Mediterranean Advisory Committee on Medical Research. The World Health Organization is most grateful to the Government of Cyprus, for hosting this meeting, and to Your Excellency for honouring us with your presence today.

I am sure that all of you present here today, will share with me and with all his former staff, our sense of sorrow at the recent loss of our late Regional Director, Dr A.H. Taba. Dr Taba always took great personal interest in the development of the Regional Research Programme and gave great priority to its activities. Since the establishment of the EM/ACMR in 1976, Dr Taba had made it a point to attend each of the meetings. All of us have benefited greatly from his wisdom and wise counsel.

In order to further a closer involvement of the EM/ACMR members in the work of the Committee, it has been decided to have the Chairperson of the Committee serve for a period of three years, instead of electing a new one at each annual session. Professor Dr M. Abdussalam, a member of the Committee since 1977, and well-known internationally for his work, will be serving as Chairperson for the next three years. I am sure that under Professor Abdussalam's leadership

the Committee will continue to guide the research efforts of the Eastern Mediterranean Region most effectively. I take this opportunity also to welcome our new members: Dr Abdul Salam Al Majali from Jordan, Dr Amin Ahmed Abdo Nasher from Democratic Yemen and Dr Bashir Hamad from Sudan, and look forward to their contributions.

This year we have again a full Agenda for the Committee to deliberate. Following the successful completion of the Three-Country Health Coverage Study, and in accordance with the advice rendered by you at your last session, WHO has offered to collaborate with Member States in planning and carrying out national Coverage Studies. A Coverage Study Workshop was held in Islamabad, Pakistan, under the auspices of the Pakistan Medical Research Council, in May this year and a proposal for a Coverage Study has been formulated and it is now in the process of being finalized.

You are all well aware that the achievement of the goal Health for All by the Year 2000, through primary Health Care, is now the overriding objective of the Organization and of all Member States. Research has a key role in implementing the strategies planned for achieving this objective, and therefore research in the broad area of Primary Health Care has assumed special importance. The Committee will be discussing possible approaches on how research in this area can be fruitfully developed and what are the priority areas in which research should be promoted, so as to facilitate the achievement of the Global objective.

Chronic non-communicable diseases, especially Cardiovascular Diseases, are fast emerging as a major health problem in the majority of our Member States. There is a great need for developing prevention and control programmes against these diseases, so that their further spread is lessened in time, in the hope that they do not assume the same magnitude as in the Western world. To promote the development of these prevention and control programmes and to demonstrate their effectiveness to national health authorities, so that resources

may be allocated to these programmes in the future, it is proposed to sponsor several research studies in this field in the coming years. Your views on this whole area, together with the topics for research, are being solicited at this session.

The Diarrhoeal Diseases Programme has continued to make steady progress. National programmes for Diarrhoeal Diseases Control have been formulated, with the Organization's collaboration, in several countries of the Region and Demonstration and Training Centres have been established in Lahore, Pakistan, and in Alexandria, Egypt. It will be recalled that the Committee reviewed the research activities of this programme at its last two sessions; at this session a Progress Report will be submitted to you. Immediately after the Advisory Committee Meeting, a Meeting of the Scientific Working Group on Diarrhoeal Diseases is going to be held to review protocols for several studies that have been formulated recently and have been submitted to us for possible funding. Several of the Committee members will be participating in this Scientific Working Group Meeting.

The Advisory Committee, at its 4th session in 1979, reviewed the proposed research component of the Blue Nile Health Project in the Sudan. Since that time, the project has been firmly established and several research studies have been initiated. It was considered appropriate that the Committee should review once again the research activities of this important multidisciplinary and multisectoral health development project.

In the light of the Seventh General Programme of Work for the period 1984-1989, the Secretariat has recently completed a major planning exercise for the Organization's Medium-Term Programme for the same period. The proposals pertaining to the Research Promotion and Development Programme are being placed before you for your comments and advice. We are particularly interested in having you undertake an extensive review of the regional research activities that we have so far supported. We hope that in the light of these, you will give us suggestions about how to develop the research programme along

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increasingly meaningful lines in the coming year. In this connection, we are also asking you to review the working of the annual meetings of the Committee and to suggest how it can be further improved and made more fruitful.

In conclusion, I would like to thank once again the Government of Cyprus for hosting this meeting, and Your Excellency for so kindly agreeing to be with us today and to inaugurate this meeting. I also wish to thank the Committee members and resource experts for taking the time and trouble to come to the meeting, and I wish you all a pleasant stay in Nicosia.

ANNEX III

AGENDA

1. Opening of the Meeting
 2. Election of Officers
 3. Adoption of the Agenda
 4. Health Services Research
 - a) Report of the Health Coverage Workshop
Islamabad, 26 May - 2 June 1982 EM/7TH.MTG.ACMR/4
 - b) Research in Primary Health Care EM/7TH.MTG.ACMR/5
 5. Regional Research Programme in Cardiovascular Diseases (CVD) EM/7TH.MTG.ACMR/6
 - Global CDV Research Project Summaries EM/7TH.MTG.ACMR/6(a)
 6. Progress Report on Research Activities in Diarrhoeal Diseases EM/7TH.MTG.ACMR/7
 7. Review of Research Activities in the Blue Nile Health Project EM/7TH.MTG.ACMR/8
 8. Review of the Regional Medium-term Programme for Research Promotion and Development, 1985-89 EM/7TH.MTG.ACMR/9
 9. Suggestions for further facilitating the work of the meetings of the EM/ACMR EM/7TH.MTG.ACMR/10
 10. Discussion on new initiatives for promotion and development of research activities in the Region EM/7TH.MTG.ACMR/11
 11. Review of the recent activities of the Global Advisory Committee on Medical Research ACMR23/81.12 Report
 12. Recommendations and Summary Report
- Closure of the Meeting.

ANNEX IV
LIST OF RESEARCH PROJECTS IN BLUE NILE HEALTH PROJECT

NO.	Subject of Research Project	Starting Date	Period of trial (years)	Principal investigators	Source of Funds
1	The prevalence of aquatic vegetation in Gezira canals. The relationship between vegetation and snails and the effect of vegetation control on snail population.	Sep 81	4	Dr Asim Daffala Dr Lutfi Mr Abdul Moneim	BNHP/USAID
2	Study on malacophagous fish and snail competitors (local and exotic) as possible biological control agents for <u>Biomphalaria pfeifferi</u> and <u>Bulinus truncatus</u>	Nov 81	4	Dr Asim Daffalla Mr Elias	BNHP/USAID
3	Assessment of low-cost, small-scale, clean water supply system in Gezira, Sudan, with particular reference to reduction of water contact and schistosomiasis transmission	Mar 82	2	Dr Asim Dafalla Dr Alan Fenwick	Edna McConnel Clark Foundation through Sudan MRC
4	Schistosomiasis transmission: dynamic study for planning an integrated control of snail intermediate hosts of the disease	Jun 80	3	Prof Mutamed A.Amin <u>et al</u>	TDR Schistosomiasis Applied Field Research through University of Khartoum
5	Comparative cost effectiveness studies on larvivorous fish <u>Tilapia nilotica</u> and <u>Tilapia zilli</u> for mosquito control	Jun 81	2	Mr Salah Hassan El Safi Dr A.M.Haridi	BNHP/National Council of research
6	Impact of pesticides on aquatic animals in irrigation canals in Gezira	Jan 82	2	Dr A.M. Haridi Miss Afaf MSC student	University of Khartoum BNHP
7	Study on the relation between weeds and snails for development of environmental control of snails	May 81	2	Dr A.M. Haridi Mr Omer Saeed	BNHP/USAID

NO.	Subject of Research Project	Starting Date	Period of trial (years)	Principal investigator	Source of Funds
8	Study on the impact of mechanical weeding of canals on snail population in Managil minor canals	Oct 81	18 months	Dr A.M. Haridi Mr Khidir Mr Pol Kolock	BNHP
9	Field evaluation of <u>Tilapia</u> and Carp for mosquito and snail control	Oct 82	3	Dr A.M. Haridi Mt T.T. George	TDR/BNHP/Dept. of Fisheries
10	Phase III Clinical trials of Oltipraz against <u>S. mansoni</u> infections in school children in Gezira, Sudan	Dec 81	8 months	Dr M.A. Kardman <u>et al</u>	Rhone Poulanc, NIH., USA through Michigan State University
11	Phase III Clinical trials of Oltipraz against <u>S. mansoni</u> infections in school children in Gezira, Sudan	Jun 82	12 months	Dr M.A. Kardman	PDP, WHO, through Medical Research Council, Sudan
12	Phase III Clinical trials of praziquantel against double infection caused by <u>S. mansoni</u> and <u>S. hematobium</u> in Gezira, Sudan	Dec 81	12 months	Dr M.A. Kardman Dr A. Fenwick	PDP, WHO, through Medical Research Council, Sudan
13	Serological measurement of malaria incidence in the Gezira	Oct 82	6	Dr Mustafa Abdalla Mr Faysal Tayeb	Ministry of Health, Sudan, BNHP
14	Impact of schistosomiasis and malaria on agricultural productivity	Jun 83	18 months	Dr A.M. Haridi Mr Ahmed El Badawi Mr Faysal Osman	TDR, BNHP, Sudan Gezira Board