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REPORT ON THE
EM REGIONAL ADVISORY COMMITTEE ON BIOMEDICAL RESEARCH
FIFTH MEETING

Nicosia, 10 - 12 September 1980

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

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I INTRODUCTION

The Fifth Meeting of the Eastern Mediterranean Advisory Committee on Biomedical Research was held in Nicosia, Cyprus, from 10 to 12 September 1980. It was attended by members of the Committee, resource experts and WHO staff members from the Regional and Geneva Offices. The List of Participants is given in Annex I.

II OPENING OF THE MEETING

The Meeting was opened by Mr Kleanthis Vakis, the Director-General of Health, Ministry of Health, Government of Cyprus, on behalf of the Minister of Health. The Minister in his welcome address which was read by Mr Vakis pointed out the importance of biomedical research in the fight against diseases and the achievement of health. In view of the increasing cost, coordination of research on a regional basis had become necessary. This was specially applicable to a Region such as this, where the size of the countries and availability of facilities do not permit optimal utilization of human resources and familiarization of results of research carried out within and outside the Region. The Minister was confident that this Committee, comprised of eminent experts, will substantially contribute to the increase and application of knowledge in the Region and assist in the achievement of the global goal of Health for All by the Year 2000. He added that in Cyprus there were limited opportunities for research; however, given the appropriate guidance and encouragement, scientists in this country would be willing to undertake research. In this connection he mentioned the establishment of a Centre for study and control of Thalassaemia syndromes. He wished the members of the Committee a pleasant stay in Cyprus and had great pleasure in declaring the Meeting open.

Dr A.H. Taba, Director, WHO Eastern Mediterranean Region, in his opening address (Annex II), while welcoming the participants to this meeting, expressed his thanks to H.E. The Minister of Health of Cyprus for hosting the meeting and making excellent arrangements for holding it.

Dr Taba informed the members of the progress made in the further promotion and development of Health Services Research capability in the Region, including implementation of the three-country coverage study, and Regional Course in Health Services Research and Community Medicine held at the Department of Community Health, University of Nottingham, earlier this year. He felt that now, as a considerable number of nationals had been oriented to Health Services Research methodology, an intensive follow-up action at country level was required, and he would like the Committee members to suggest how this can best be done.

Following the Committee's recommendation at one of its earlier sessions, a working paper on the research manpower situation in the Region had been prepared for discussion. In order to strengthen national capabilities for managing medical research a consultation had been held to advise on the planning and organization of a training programme in research management.

During last year, meetings of three scientific working groups were held dealing with liver diseases, malaria and diarrhoeal diseases. The Committee would be reviewing their reports during this session. The Committee would also be reviewing the research component of the Regional programmes in Cancer and Mental Health.

In view of the important role of research in the attainment of the goal of Health for All by the Year 2000, it was considered timely that the EMACMR discuss and re-examine the priorities laid down at its first session, and identify research topics most relevant to the goal of HFA/2000.

The Special Programme for Research, Development and Research Training in Human Reproduction has made valuable contribution to the development of research capability in this field in the Region. This Committee would have an opportunity to review the activities of the programme during this Meeting, and would as well review the progress in the Region related to the other WHO Special Programme of Research in Tropical Diseases.

Finally Dr Taba stressed the possible contributions that members can make to the development of research within their own countries and he added that the Organization will be pleased to collaborate with them in this effort.

III ELECTION OF OFFICERS AND ADOPTION OF THE AGENDA

The following Officers were unanimously elected:

Chairman	Dr M. Abdussalam, Director, International and Scientific Cooperation, Institute of Veterinary Medicine, Berlin (West);
Rapporteur	Dr A.M. El Hassan, Director, Institute of Tropical Medicine, Medical Research Council, Khartoum, Sudan.

The Chairman in his opening remarks said it was evident from the Regional Director's address and the documentation placed before the Committee, that the regional Research programme has continued to develop. On behalf of the Committee he expressed his appreciation of the support being provided to this programme by the Regional Director, and assured him that the Committee members would try to do full justice to the items placed before them for consideration.

The Provisional Agenda was approved (Annex III).

IV TECHNICAL MATTERS

1. Three-Country Coverage[1] Study (Agenda item 4a)

The purpose of the three-country (Bahrain, Egypt, Yemen Arab Republic) coverage study is to suggest, on the basis of research findings, policy options and service strategies which would lead to effective coverage by the year 2000. Effective coverage, for purposes of the study, refers to Health Services Delivery Systems (HSDS) which:

- ensure availability of services which are socially and economically accessible to actual and potential users,
- are responsive to the actual and perceived health needs of the intended beneficiaries, and
- are utilized by the population at risk.

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[1] For the criteria used in selection of the three countries, reference may be made to the Report of the Fourth Meeting of the EM/ACMR (EM/RSR/8).

The study is being conducted at three levels in each country - the National, the Intermediate and the Community.

National level

The analysis of macro-level aggregate data at the national level yielded demographic, socioeconomic data as well as health policy statements. The countries share common problems of rapid population growth and high infant mortality. Even though there were great differences in GNP per capita they all had relatively low quality of life which was measured by the Physical Quality of Life Index (PQLI)[1] a measure of the level of progress in meeting basic human needs.

Similarities likewise exist in formulation of health policy, which in all three countries is perceived as the function of the Government. All three countries share concern with primary health care and have enunciated policy statements with respect to it.

Intermediate level

The Intermediate level survey is designed to provide "real world" information on the structural capability of the HSDS in each country. The data collection instrument used was designed to obtain the information through direct interview with a provider of service at sampled units offering basic health services in each country. Systematic sampling of such units was done in each country but the size of the sample varied, i.e., 33 percent of all units offering basic health services in Bahrain, 5 percent in Egypt and 38 percent in the Yemen Arab Republic.

Community level

Three to four typical communities in each country which have a fully functioning health unit designated for the provision of basic services are studied in depth in order to provide knowledge about the functional capability of the HSDS, its responsiveness to

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[1] The PQLI combines infant mortality, life expectancy at age one (or at birth) and literacy into a single composite index. See Todd K. Greentree and Rosemarie Philips "The PQLI and the DRR - New Tools for Measuring Development Progress" Communiqué (Washington D.C. - Overseas Development Council, 1979, p.4)

intended beneficiaries, treatment-seeking behaviour of the community, environmental and other sector activities (e.g., education, social welfare, economic activities) related to illness, pattern of care, and community definitions of health. Community level data generate knowledge about the interface between formal and informal providers of care, and actual and potential beneficiaries. A variety of data collection approaches are used - both quantitative and qualitative. Three surveys and two direct observation studies are being implemented, i.e., community environment and observation studies, household survey and household environment observations, observations of service provision at the unit and in the community, and interviews with providers of health care. The latter will be studied in depth using the ethnographic approach, i.e., participant observation and intensive but non-directed interviewing to identify attitudes towards responses to and utilization of treatment-providing personnel and institutions in the community.

The ethnographic study of the community complements and corrects quantitative data. While the former is not amenable to statistical manipulation it is essential in health services research for it is better to be approximately right than precisely wrong.

The Coverage Study makes three important contributions - new and accurate knowledge, a practical example of integration of the quantitative and qualitative research methods, and development of manpower capabilities.

The outcomes of the national, intermediate and community level studies provide data for within-country comparison. Data obtained from the "real world" as a result of the studies are used in policy analysis, and to suggest alternative policy options and service strategies to achieve coverage by the year 2000. Because of the common research design between countries, comparisons can also be made which can be used by country health policy makers.

The coverage study uses a multidisciplinary participative design in which core consultants serve as resource persons, and nationals are active in all phases of design and implementation. Use of three levels of analysis provides a more complete and realistic picture of the factors affecting health services delivery. The integration of quantitative and qualitative research methods yields information on the interaction between providers

of care and the population at risk. Expert opinion, survey research, direct observation and intensive follow-up of the typical communities clarify, complement or correct findings from the national and intermediate level studies so as to minimize time and cost.

The coverage study also serves as an experiment in health manpower development for Health Services Research. The intermediate and community level studies are the laboratory for training country nationals in developmental health services research. Training workshops are held in each country and workshop participants pilot test study instruments before application. All trainees are involved in implementation of the research.

Thus, the coverage study provides:

- real world data on the structural and functional capabilities of the HSDS relevant to the coverage issue in each country and between countries;
- a model design incorporating many disciplines and research methods, which is being successfully used, and which other countries in the Region and elsewhere may wish to use to undertake health policy analysis for achieving effective coverage with basic health services by the year 2000;
- a model for development of research capabilities of health manpower.

Among the products the coverage study would generate are:

- viable suggestions for enhancing the possibility of achieving coverage by the year 2000, and
- a nucleus of people trained in developmental health services research.

The Committee was satisfied with the design and progress of the study. It was thought advisable to await the results of the study before similar projects are undertaken in other countries.

During the discussion the role of traditional healers in primary health care was raised. It was realised that the attitude of Governments in the Region towards traditional healers varied all the way from benign neglect to resistance to attempts at their integration into the health delivery system. It was agreed that, if properly trained, the traditional healers were a potential manpower source that could be utilised in the health

delivery system and it is up to national health authorities to give them the place it considers that they deserve.

The Committee recommended that the study should continue to be supported.

2. Regional Course in Community Medicine and Health Services Research (Agenda Item 4b)

The Regional Course in Community Medicine and Health Services Research, sponsored by WHO/EMRO, was conducted by the Department of Community Health, University of Nottingham, England. It was attended by 18 participants from 5 countries and lasted 10 weeks.

This Course brought together two strands of development within the Region:

(i) Health Services Research
(ii) Community Medicine Training.

In the field of Health Services Research, it directly followed the Pre-Course Workshop held in Cairo in 1978, and the Workshops held in Alexandria and Islamabad in 1979. With regard to Community Medicine, while it was deemed relevant to developments in several countries, it was specially designed to meet the needs of those preparing for the Fellowship in Community Medicine of the College of Physicians and Surgeons of Pakistan.

The aims of the Course were that participants should return to their own countries with:

1. An awareness of current trends in Community Medicine on an international basis.
2. The ability to plan, design, initiate and implement health service research projects in their own country.
3. The ability to assess the quality of research projects and published work undertaken by others.
4. The ability to adopt a developmental approach to the training of health personnel and the planning of health services.

The Committee was informed that the participants felt that the objectives of the Course had been fulfilled and that they had benefited from it. Many felt that their

outlook and attitudes had changed during the Course. The preparation of individual projects with guidance from the faculty have been considered to be especially valuable.

The staff associated with the Course felt that there was need to ensure adequate and continuing follow-up, both with regard to the individual research projects and the further development of interest and skills in Community Medicine and Health Services Research. This might be achieved by encouraging the participants to organize Workshops where they could report on their research, help and advise their colleagues and generally stimulate health service research within the country.

In the discussion it was agreed that emphasis should now be placed on follow-up. This should include feedback from the participants as to what they actually achieved after the Course, the need for close coordination between WHO and the relevant national research organizations, such as the Medical Research Councils, to support and encourage initiatives and to work together in planning further training courses. It was felt strongly that the Course should not be seen as an isolated event, but an important part of a planned development. Some continuing support for the participants might come from the staff at Nottingham, but this must inevitably be limited. The Committee suggested that the learning material used during the Course be considered for being adapted as a training manual, to be used by the participants of the Course and other relevant authorities in organizing national courses. It was also suggested that in future courses, every effort should be made to make available all relevant country data and to utilize them extensively for formulating research projects, so that they are related to national priorities.

The Committee members recommended that for future Courses, the selection of participants should be made by designated national authorities in consultation with the Medical Research Councils or the analogous national body.

In this connection, it was noted that copies of communications on matters dealing with medical research and research training addressed to the Ministries of Health will be sent to the Research Councils, where these exist in the Region - and vice versa, and also to concerned universities.

3. Directory of Research Institutions in the EM Region (Agenda item 5)

The Committee was informed that as the Fifth Edition of the World Directory of Medical Schools and the EMRO Directory of Education and Training Programmes of Health Personnel have been recently brought out, it was therefore felt that the Directory of the Research Institutions which had previously listed many Medical Schools, should now include only selected institutions, actively engaged in Biomedical Research. Hence, the Directory placed before the Committee listed only 63 institutions as compared to 229 previously, and the information given therein was brief.

The members appreciated the problems involved in compiling a Directory, containing up-to-date, accurate and reliable information. It was felt that in countries where Research Councils or analogous bodies exist, they should be encouraged and supported to establish a system for listing ongoing research and also the resources available for Biomedical Research in the country. As far as possible, an attempt should be made to compile this information in a standard format throughout the Region.

The Committee recommended that another effort be made to improve the content and coverage of the Directory, and EMACMR members would actively collaborate with the Secretariat in this task.

4. Research Manpower Situation in the Region (Agenda item 6)

The subject of research manpower and creation of an adequate career structure for research workers in developing countries has assumed considerable importance during the recent past, on account of the efforts being made by WHO and through bilateral agreement in some countries to develop and strengthen national capabilities for research. It is obvious that these efforts will, at best, have only a temporary beneficial effect, unless the countries themselves take steps to provide medical research workers with some assurance of sustained career opportunities.

This matter was brought to the attention of the Member States at the Meeting of Sub-Committee A, 29th Session of the Regional Committee for the EM Region, held in October 1979. The Sub-Committee in its resolution EM/RC29A/R.6, amongst other things,

urged Member States to ensure that suitable manpower is retained in countries through the creation of a career structure for scientists engaged in research.

A preliminary situation analysis of the research manpower situation in some countries of the Region showed a paucity of full-time medical research workers, even in the presence of an adequate career structure in countries. In the countries surveyed there were no comprehensive plans for developing research manpower.

It appears that in the prevailing economic situation it would not be possible to attract many scientists for a full-time career in research, especially those who are medically qualified. Therefore greater attention should be paid to involving scientists from the medical and allied fields on a part-time basis.

From the discussion that took place on this item it would appear that there is no single solution to this problem in the countries of the Region. In fact a variety of innovative approaches will have to be tried out. Some of these are: the involvement of medical students during their summer vacations in some research; making the acquisition of a postgraduate research degree desirable for academic appointments; assisting young scientists in preparation of protocols and writing papers, and according research workers adequate social recognition to compensate for monetary losses.

The Committee was also informed of the facilities available under various WHO collaborative programmes for developing research manpower.

It was agreed to recommend the following steps for improvement and further development of research manpower in the Region:

a. The Regional Office should draw the attention of the relevant authorities in countries (Ministries of Health, Higher Education, National Research Councils) to the need to establish a pool of research scientists and to provide a suitable career structure for them.

b. Information on various measures adopted (including legislation) in different countries of the world for improving the conditions of service of full-time medical research workers can be collected and disseminated to Ministries of Health and Education and Research Institutions and Organizations in the Region.

c. National research programming exercises should be promoted. Planning for the development of research manpower will be an important element of these programming exercises.

d. In countries where national research organizations have yet to be established or where human and financial resources are scarce, an attempt can be made to establish a nucleus of research workers, by means such as creating tenured research posts in Universities and Health Institutions, to carry out commissioned research; establishment of research units/institutes with full-time staff; grants of long-term research fellowships or career development awards to carefully selected young research workers.

e. Recognizing the difficulty of the development of a cadre of full-time medical research workers in the near future in most of the countries of the Region, it is proposed that approaches involving existing health personnel, in both teaching and service positions, in medical research activities, be developed and implemented in the countries. One of such approaches would be the holding of broad Research Methodology Courses (with emphasis on epidemiology, statistics, evaluation of various health-related interventions), and subsequently following up such courses by implementation of small, time-limited research projects by course participants.

5. Training Programme in Research Management (Agenda item 7)

The Committee had before it the report of the Consultation convened by the Regional Office to advise on the planning and organization of a training programme in research management.

The Committee endorsed the recommendation of the Consultation that as an initial step a Regional Workshop be planned and organized, and the objectives proposed and the topics to be covered during the Workshop (Annex IV) were considered appropriate and relevant. The Committee also agreed with the criteria for selection of participants in the Regional Workshop.

It was further decided to recommend that a case-study based on the management of research in diarrhoeal diseases be included in the Workshop.

6. Report on a Scientific Working Group on Liver Diseases held in Karachi, 17-19 December 1979 (Agenda item 8a)

The Committee reviewed the report of the Scientific Group on Liver Diseases, and endorsed the research needs identified and the plans of action for meeting these needs (Annex V). The Committee was informed of the steps so far taken by the Secretariat to implement the recommendations of this Group, including the organization of a Regional Workshop to standardize the histological criteria for the diagnosis of liver disease, to be held in February 1981.

7. Malaria Research Programme in the Region (Agenda item 8b)

The EM/ACMR at its fourth session last year, had reviewed and endorsed the regional programme for research, especially field research in malaria.

The Committee at this session reviewed the report of the meeting of the Scientific Working Group on Malaria held in November 1979 and endorsed the priority areas for research delineated by the Group (Annex VI).

The Committee stressed the importance of Research to assess the integration of malaria control programme with the delivery of primary health care.

The members were also informed of the potentialities of research and training in the comprehensive project for the control of water-associated diseases in the Gezira province in the Sudan, and the possibility of WHO facilitating the visit of any of the Committee members to this project, should they so desire.

The Committee was pleased to note the efforts being made to train nationals in the Region in the assessment of P. falciparum response to drugs by the micro in vitro technique.

8. Report of the Scientific Working Group on Diarrhoeal Diseases (Agenda item 8c)

The Committee, while reviewing the report of the first meeting of the Regional Scientific Group on Diarrhoeal Diseases, considered this subject of great importance in view of diarrhoeal diseases being a major cause of infant mortality and morbidity. The

topics of research delineated by this Group, pertaining to epidemiology, programme implementation, utilization and evaluation (Annex VII) were endorsed. It agreed with the Group that it is difficult to rank the recommended area, as its relative priority depends upon the status of diarrhoeal diseases programme development in the countries of the Region. The Committee also agreed with the steps suggested by the Group for managing the research programme in diarrhoeal diseases in the Regional Office.

The Committee emphasized that while there was an awareness of the magnitude of the problem of diarrhoeal diseases in the Region, it was not matched by action. In particular there was a reluctance on the part of paediatricians to accept and use the WHO/UNICEF formula for oral rehydration therapy. In view of the efficacy and practicality of using ORS in the treatment of diarrhoeal diseases, the Committee recommended research efforts for exploring innovative methods of promoting the use of ORS. Such methods must include the use of various conventional health workers and other motivated individuals who enjoy acceptability by the community, such as traditional midwives and religious leaders.

The Committee further recommended that the Regional Office actively follow up the implementation of the plans prepared by the Scientific Working Group in interested member countries.

9. Research in the Regional Cancer Programme (Agenda item 9a)

The Committee reviewed the cancer situation in the Region, and also the report of the Regional Advisory Panel on Cancer. It agreed with the Advisory Panel that strengthening and extension of hospital-based registries be continued.

In view of the association of the use of tobacco, particularly cigarette smoking, with carcinoma of bronchus, oesophagus, hypopharynx, larynx and bladder, and considering that primary prevention of these cancers is possible, the Committee recommended that socio-behavioural studies on smoking should be encouraged including the impact of health education, particularly in young people.

The Committee agreed with the Panel's proposal to extend the programme of early detection of cancers of the breast, bladder and cervix.

The recommendations of the Regional Advisory Panel on Cancer, which were endorsed by the Committee, are given in Annex VIII.

10. Research in the Regional Programme of Mental Health (Agenda item 9b)

A survey initiated by the Regional Office in 1972 clearly demonstrated the deficiencies in the provision of mental health care, the scarcity of resources and the lack of information on the prevalence of mental illness. The findings of the survey had been submitted to a Group Meeting on Mental Health* and two major areas of mental health research had been identified, namely: (a) clinical research, and (b) epidemiological research. The latter type of research would aim at trying to answer questions such as: What kind of mental diseases are prevalent and which population groups are affected? What kind of people currently avail themselves of psychiatric help? In which way are the services planned or organized, and which resources are available? and so forth. This type of research is required for improving the planning and development of the mental health services.

In order to stimulate the countries to utilize epidemiological methods and improve the system of data collection and information, WHO/EMRO organized in 1975 a Seminar on the Application of Psychiatric Epidemiology. In essence, the Seminar was designed as an innovative activity, the main objective being to provide participants with up-to-date knowledge of epidemiological psychiatry and help them acquire skills in mental health research. Among the practical exercises was the designing of a mental health programme and the possibilities for use of the epidemiological method in this process. Other activities included the preparation of more appropriate data sheets for outpatient and inpatient services.

Since 1975 and within the WHO medium-term mental health programme, Consultation and coordination between countries and also between Regional and Central Offices on research activities have grown considerably. The thrust of the programme has been mainly directed towards the utilization of the potential forces of research for the better understanding

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of the nature and extent of mental illness and the development of more effective ways and means of prevention and treatment measures.

The major areas of study in which countries in EMR have collaborated include:

1. strategies for extending mental health care,
2. monitoring of mental health needs,
3. assessment of psychosocial disabilities,
4. child mental health and psychosocial development,
5. a number of other areas, e.g., studies on drug abuse, mental legislations, etc.

The WHO Collaborative Study on Strategies for Extending Mental Health care was initiated in 1976 and is conducted in 7 geographically defined areas: Brazil, Colombia, Egypt, India, Philippines, Senegal and Sudan. The aim of this research work is to develop and evaluate alternative and low cost methods for extending mental health care. The studies in Egypt and Sudan are now in their final phase. The results have given further information regarding the extent of mental disorders and indicated an overall frequency of 13.9 percent among patients presenting at the primary level of health care. In brief, the study has helped to set the priorities for the management of mentally ill persons and explored possibilities for effective community participation and integration of mental health into the health system.

The WHO-coordinated project on Monitoring of Mental Health Needs is also a global project and includes Kuwait as the study area in this Region. Essentially the project aims at demonstrating ways in which mental health information can be used for the better provision and more effective development of mental health services. The second phase of this project in Kuwait has been finalized and the collected information has a wide range of implications for future planning and programming for the delivery of mental health care.

The experience gained in Kuwait has proved to be extremely valuable and the project is generally promising for future activities. It is envisaged that other countries in the Region, namely Libya, Saudi Arabia and Sudan, which have already expressed interest in the development of mental health information system, be involved in this study and

make use of the experience gained in Kuwait. It is also proposed that a national Workshop with WHO inputs take place in 1981/82 in Kuwait to review the findings of the third phase and discuss the use of the new knowledge and information for the further development of mental health care.

In the field of child mental health, a preliminary study has been carried out in Egypt and it is planned that more in-depth studies be carried out in selected countries of EMR. The aim of these studies would be to improve the prevention and treatment of childhood mental health problems and promote children's psychosocial development.

The Committee appreciated the progress made in this field, and agreed in principle with the research proposals submitted by the Secretariat. However, it was recommended that these proposals be submitted to a Scientific Working Group for further scrutiny and refining.

11. Regional Biomedical and Health Services Research Priorities with Special Reference to "Health for All by the Year 2000" (Agenda item 10)

The Committee reviewed and discussed the research priorities for the Eastern Mediterranean Region established by the EMACMR at its first meeting in 1976, taking into consideration the need to attain HFA/2000 through primary health care as a means to achieve effective health coverage. The complexities and difficulties involved in focusing on a few selected research priority areas which can most effectively enhance the achievement of HFA/2000 with the limited WHO resources were recognized during the discussion, and the Committee suggested the following main themes around which priorities should be set rather than trying to pinpoint such priorities:

1. Behavioural and attitudinal changes required by both providers and consumers for achieving HFA/2000 and the institutionalization of primary health care.
   a. Ways and means to enhance political commitment.
   b. Community involvement (participation) in development of health policies, planning and implementation of PHC.
   c. Integration of formal and informal (traditional) healing resources in order to achieve coverage with the available limited resources.

d. Health education and promotion of self-care approach in order to rationalize the utilization of available health services.

e. Changes in health professional education necessary to produce health personnel who are community-oriented rather than health system-oriented and who are problem solvers rather than disease-oriented.

2. Organizational and managerial modifications required for the effective implementation of primary health care.

a. Participative management of health services in which the community plays a positive role.

b. Enhancement of intersectoral cooperation.

c. Reallocation of resources to maximize the impact of health services on the community health status.

d. Early evaluation of PHC programmes

3. Economic and technological obstacles which may inhibit the development of effective primary health care.

a. The rising cost of drugs.

b. The development of appropriate technology.

c. The economics of disease control including health and health-related interventions.

d. The high health and fertility reduction returns of improving MCH services.

4. Major diseases.

The Committee emphasized the need for research in major diseases (high morbidity and/or mortality) prevalent in the Region taking into consideration both present and expected future disease patterns. Viral hepatitis, diarrhoeal diseases and schistosomiasis were highlighted as important examples

With the establishment of the above major themes, the Committee recommended that the task of refining the priorities should be assigned to a WHO Consultation which should define research areas and develop guidelines for research protocols in those areas. These guidelines will help scientists and research institutions in the countries of the EM Region to formulate suitable research proposals.

12. Progress Report on WHO Special Programme for Research and Research Training in Tropical Diseases (Agenda item 11a)

Amongst the diseases covered by the Special Programme for Research and Research Training in Tropical Diseases (TDR), malaria and schistosomiasis were the most relevant to this Region, as a whole, onchocerciasis and leprosy constituting a problem only in some countries.

The TDR is currently supporting 35 projects in Institutions in 7 countries of the Region, and another 16 are pending for consideration by the concerned Scientific Groups. A number of projects (42) submitted by investigators have been rejected, as they were often not presented in an appropriate manner or did not relate to the priority areas delineated by the Scientific Working Groups.

Attempts are being made to stimulate interest in a few research institutions to expand their activities into the TDR priority areas and, if required, formulate proposals which may be acceptable for institution strengthening and for training research workers.

The Committee noted with concern that the quantum of support received through TDR in the Region is small, and recommended that the Regional Office actively collaborate with scientists and institutions in formulating and writing up of research projects for submission to the Programme.

13. WHO Special Programme for Research, Development and Research Training in Human Reproduction (Agenda item 11b)

In response to recommendations of the World Health Assembly, the Advisory Group of the Special Programme, WHO regional offices, national authorities and panels of scientific experts, the Special Programme of Research, Development and Research Training in Human Reproduction from its inception has continued to evolve in order to meet the reproductive health needs of the Member States of WHO. Whereas, initially, major emphasis was on research and development of new methods of fertility regulations and psychosocial research as a guide for new technology, the Programme has added a major emphasis on the safety and effectiveness of existing methods; psychosocial research and health services research

in family planning; research on infertility and on the strengthening of national research resources to provide a critical mass of researchers and facilities in the field of human reproduction.

The scope of the programme was reviewed in terms of subject matter, both in the global programme and within the Region. Within the Region the 75 HRP-supported research projects, involving 25 institutions, included studies on the relationships between fertility and health; epidemiological studies of infertility; clinical studies of the safety of existing methods, such as the use of oral contraceptives among women with schistosomiasis; service research comparing the safety, effectiveness, acceptability and relative costs of midwives and physicians inserting intrauterine devices; studies on the perception of menstrual bleeding; the synthesis of new steroidal preparations, and comparative trials for the treatment of infertility.

In addition to individual projects the WHO Collaborating Centres for Clinical Research in the Region (Chatby Maternity Hospital, Alexandria, and National Research Institute for Fertility Control, Karachi) participate in a large number of multicentred collaborative clinical trials.

The mechanisms of the programme's operations also were reviewed, particularly noting the involvement of the scientists from the Region in the Advisory Groups and the Task Forces. Note was also made as to the criteria for priority setting in the programme which involves, among other elements, consultations with national health and family planning authorities, WHO Regional Offices, recommendations of the WHA and the Advisory Group. The programme is problem-solving and goal-directed, drawing upon an expanding global network of scientists representing such disciplines as endocrinology, biochemistry, clinical medicine, epidemiology, public health administration, social and behavioural sciences, economics, etc.

The research resource strengthening component of the programme has received more attention in recent years. These efforts are directed at creating a critical mass of facilities and scientists in a number of institutions to serve as centres of excellence

at the national and regional level as well as to serve significant contributors to the global programme. Despite extensive institution strengthening efforts in the Region, including the awarding of over 70 research training grants covering laboratory, clinical and epidemiological aspects of human reproduction, the impact and response on the national and regional level has been limited.

In the discussions it was emphasized that it was important to build a research component into the delivery of family planning and MCH services, which among other things could monitor the effects and safety of new drugs and examine such issues as increasing the acceptability of family planning by the community. It was also noted that it was important to involve all medical and health professionals in family planning activities.

The Programme has emphasized its willingness and desire to continue and to increase its collaboration with national authorities, research councils and institutions in the Eastern Mediterranean Region in developing a strategy of institution strengthening and resource development and in the planning and implementation of family planning research, including research on infertility, in those areas of highest concern to national authorities and the global programme in human reproduction.

V CONCLUSIONS AND RECOMMENDATIONS

The Committee noted with appreciation the progress being made in research in the Region and thanked the Regional Director for his continuing interest and support for the Regional endeavour in this field. The main conclusions and recommendations of the Committee are summarized below:

1. The three-country coverage study should continue to be supported and similar studies in other countries of the Region should be initiated after the results of the present study have been evaluated.
2. The national participants in the recently held course in community medicine and HSR methodology should be encouraged and supported to implement the research projects

prepared by them during the course, and organize national training programmes in HSR methodology for various categories of health workers.

3. It was recommended that renewed efforts be made to improve the coverage and contents of the Regional Directory of Institutions engaged in biomedical research. In countries where medical research councils or analogous bodies exist, they should be encouraged to compile a national directory.

4. The attention of the relevant authorities in the Region should be drawn to the need for establishing a suitable career structure for research workers and to employ innovative means to attract and retain them.

5. In order to orient and attract a larger number of persons to medical research, broad research methodology courses should be organized with emphasis on planning, implementation and publication of research results.

6. In order to upgrade and develop national expertise in research management, a Regional Workshop should be held in this field. It should be followed by similar national workshops.

7. The Committee endorsed the recommendations of the Regional Scientific Working Groups on Liver Diseases, Malaria and Diarrhoeal Diseases and of the Regional Advisory Panel on Cancer, and further recommended that the Regional Office follow up with the appropriate national authorities in the interested countries the implementation of these recommendations. In addition, the Committee made the following specific recommendations:

   a. The Research in Malaria should include and emphasize studies dealing with the evaluation of the integration of malaria control programmes and primary health care.

   b. The Committee recommended that research studies be encouraged and supported for exploring innovative methods of promoting the use of ORS, involving the various categories of health workers and other motivated individuals who enjoy acceptability by the community.

c. Appreciating the harmful effects of cigarette smoking in relation to certain types of cancer and other chronic diseases, it was recommended that socio-behavioural studies on smoking be encouraged, including evaluation of the impact of health education particularly in young people.

8. The Committee agreed in principle with the research proposals in the field of Mental Health submitted to it by the Secretariat, and recommended that they be submitted to a Scientific Working Group for further scrunity and refining.

9. In view of the importance of research in attaining the goal of HFA/2000, it was recommended that the Regional Office should convene a consultation to identify and plan research on a limited number of topics considered most relevant to this goal, and to develop guidelines for research protocols in the identified areas.

10. It was recommended that the TDR resources be fully utilized and the Regional Office actively collaborate with investigators and institutions in the Region for formulating and writing up proposals for submission to TDR.

11. The Committee appreciated the support being provided by WHO/HRP to develop research and training activities in the field of Human Reproduction within the Region, and recommended that the Regional Office with HRP activaly collaborate with national health authorities and research councils in the strengthening of research resources and promoting research projects in family planning aspects of MCH, including infertility.

ANNEX 1

LIST OF PARTICIPANTS

COMMITTEE MEMBERS

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ANNEX II

ADDRESS BY DR A.H. TABA
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WHO EASTERN MEDITERRANEAN REGION

at the

FIFTH MEETING OF THE EM ADVISORY
COMMITTEE ON BIOMEDICAL RESEARCH

NICOSIA, 10 - 12 September 1980

Excellency, dear Colleagues,

It gives me great pleasure to welcome you at the Fifth Meeting of the Eastern Mediterranean Advisory Committee on Biomedical Research, and would like to thank you for sparing the time to travel to Cyprus and attend this Meeting. I am most grateful to His Excellency the Minister of Health of Cyprus for hosting this Meeting.

While welcoming our new members, I would like to express my appreciation of the contributions made by those members whose terms expired during the preceding year, and wish to invite them to continue our collaboration.

Soon after the meeting last year, the "Three-country Coverage Study" was initiated and substantial progress has been made. Dr Hassouna, the Principal Investigator and Study Coordinator, and his group at the Institute of National Planning, Cairo, are to be commended for their efforts. Dr Hassouna will be talking to us about the results achieved so far.

In our continuing efforts to orient and train nationals in Health Services Research Methodology, a ten-weeks long Regional Course was held earlier this year, at the Department of Community Health, University of Nottingham, U.K., and was attended by 18 participants. As you will recall, we have enjoyed a close and continuing relationship with the Department for some time now and the inputs by its staff, particularly

Professor Backett and Dr McEwen, in the development of the Regional Health Services Research Programme, has been valuable. My staff and myself are deeply appreciative of this Department's contribution in organizing and running this Course. Dr McEwen is here with us and will present a preliminary report.

We feel now that a reasonable number of nationals have been exposed to HSR methodology, an intensive follow-up action is required at the country level, and would like to have your views on how best we may collaborate with national authorities in this connection.

The Directory of the Medical Research Institutions in the Region has been updated and is being presented to you in a somewhat abridged form. The quality of the information contained in such Directories is really dependent on the information provided to the Regional Office by the Institutions given in the Directory. I feel that in countries where a Medical Research Council or an analogous body exists, it should carry the responsibility of developing a suitable information system, and we will be glad to collaborate, if requested, in such an effort.

The Committee, at one of its previous sessions, had expressed concern about the manpower available for medical research in the countries of this Region. A preliminary situation analysis has been carried out and a working paper has been prepared for your consideration. I look forward to your suggestions about how the Organization can collaborate with the countries in improving the existing situation.

During the preceding two days, some of you have been busy discussing the planning and organization of a training programme in Research Management. Development of competence in this field will go a long way towards establishing and strengthening national infrastructures for medical research, and ensuring maximum utilization of available resources for research on socially relevant issues.

Since we last met a year ago, meetings of three Scientific Working Groups have been held, dealing with Liver Diseases, Malaria and Diarrhoeal Diseases. You will have an

opportunity, during this meeting, to review their reports and make recommendations about further development of research in these areas.

Continuing the practice established last year, we would like you to review the Regional Programmes of Research in Cancer and Mental Health, at this Session. In both, these areas, considerable research and training activities have taken place over the years.

You must all be very familiar with the Organization's goal of Health for All by the Year 2000, and aware of the efforts being made in our Member Countries to formulate strategies and plans for achieving this goal. As you can indeed well appreciate, research has a very important role to play in this connection. Therefore, it was considered appropriate and timely, that the EMACMR at this Session discuss and review the regional priorities for medical research which were established at the first session in 1976. I hope that you will be able to identify for us the research topics most relevant to the goal HFA/2000, so that our limited resources for research can be most effectively utilized.

The Special Programme of Research, Development and Research Training in Human Reproduction has, since its establishment in 1971, made valuable inputs in strengthening research capability in this field, in some countries of our Region. Dr Belsey, deputizing for Dr Kessler, the Director of this Programme, will present a brief overview of the programme with special attention to activities in this Region.

As you will note from these brief remarks, the Regional Biomedical Research Programme has continued to develop and advance, perhaps not at a pace which, I am sure, you, as members of the EM/ACMR would have liked it to do. This, I feel, is in a large measure due to the inadequate attention being paid to the development of medical research in the countries. Here, I would like to repeat what I said at the opening session of the EMACMR last year. I quote "even though you are here as individuals rather than representatives of your country, you can make a valuable contribution to the development

of research in your own countries, and if we can be of any assistance to you in this connection, please let us know".

There is no separate agenda item dealing with steps for promotion of research at country level, but should you so wish, we will be glad to discuss it during the next three days.

Before concluding, I wish, once again, to thank the health authorities of Cyprus for hosting this meeting and all of you for being with us to guide and counsel.

ANNEX III

AGENDA

1. Opening of the Meeting
2. Election of Officers
3. Adoption of Agenda
4. Health Services Research
   (a) Three-country Coverage Study
   (b) Regional Course in Community Medicine and Health Services Research, Nottingham
5. Directory of Research Institutions in the EM Region
6. Research Manpower Situation in the EM Region
7. Training Programme in Research Management
8. Reports of the meetings of:
   (a) Scientific Working Group on Liver Diseases, Karachi, 17-19 December 1979
   (b) Scientific Working Group on Malaria, Nicosia, 27-29 November 1979
   (c) Scientific Working Group on Diarrhoeal Diseases, Alexandria, 19-22 August 1980
9. Regional Programme of Research and Research Training activities in the field of:
   (a) Cancer
   (b) Mental Health
10. Review of regional priorities for Medical Research and Research Training with special reference to the goal "Health for All by the Year 2000"
11. Progress Report on WHO Global Research Programme
   (a) Special Programme for Research and Training in Tropical Diseases (TDR)
   (b) Special Programme of Research, Development and Research Training in Human Reproduction (HRP)
12. Summary Report
   Conclusions and Recommendations.

ANNEX IV

THE OBJECTIVES, CONTENTS, AND CRITERIA FOR SELECTION OF PARTICIPANTS FOR THE REGIONAL WORKSHOP IN RESEARCH MANAGEMENT

A. OBJECTIVES

At the end of the Workshop the participants will:

1. appreciate the scientific approach to the management of medical research and be committed to promote and implement this in their own countries;
2. have acquired relevant up-to-date knowledge of the elements of research management and be able to apply and disseminate this knowledge in their own work;
3. have developed appropriate criteria for the assessment of research management practices in their own institutions or countries; and
4. have acquired the ability to organize and conduct national Workshops on research management.

B. CONTENTS

The main purpose of the workshop in research management will be to formulate systematic approaches which would be adapted to the nature of managerial tasks required in the field of medical research. Such approaches have to take into account the following four major functions:

a. Research Promotion and Development which deal, inter alia, with policies and strategies.
b. Research Implementation, which deals with all factors concerned with implementation, such as research workers, facilities, logistics, etc.
c. Research Monitoring, where information and methodology play a predominant role.
d. Research Evaluation, perhaps the most difficult of all functions, where not only relevant techniques must be brought to bear, but also where experience and judgement must be used in the most judicious way.

In view of these functions, the workshop would comprise a number of discrete components, which may conveniently be structured as follows:

1. Relationship between medical research and national development and the impact of development on research.
   1.1 Appreciation of the role and contribution of medical research to the development of comprehensive health services in the overall context of socioeconomic development.
   1.2 Expectation from and attitudes towards medical research: emphasizing the educational effect of research in upgrading the quality of health personnel at various levels.
2. Problems related to research policy.
   2.1 Procedures for formulation of national research policy.
   2.2 Defining broad research themes for the solution of prevailing and expected health problems.
   2.3 Ranking priorities in the defined research themes.
   2.4 Determination and organization of individual and cluster of research projects as components of a research programme with defined goals.
   2.5 Coordination between various national policy-making bodies and research organizations/institutions.
3. Assessment and development of research potential in the country for undertaking the identified research.
   3.1 Manpower resources, training, emphasizing the use of team approach in research.
   3.2 Physical resources, such as equipment and supplies.
   3.3 Economic resources, recruitment and promotion procedures, incentives.
4. Generation, formulation, execution and evaluation of research projects. Establishment of systems for:
   4.1 Generation and appraisal of new research proposals and their modification.

4.2 Monitoring and evaluating of ongoing research activities.

5. Mechanisms for the exchange and application of research information.
   5.1 Systems for acquisition, processing, utilization and dissemination of research information.
   5.2 Systems for the effective application of research information and research findings.
6. Introduction to select management techniques, e.g., network analysis, programme planning and budgeting, delphi, and their application in managing medical research.

C. CRITERIA FOR SELECTION OF PARTICIPANTS

1. Nominations for participants in this activity should be invited from those countries in the Region which have an existing infrastructure for medical research, i.e., Egypt, Iran, Iraq, Lebanon, Pakistan and Sudan.
2. Three participants from each country who, on return, can work together to organize national courses.
3. The participants should preferably be holding one of the following positions in their own countries:
   a. Chief or Deputy Chief Executive Officer of the National Medical Research Council or analogous body.
   b. The principal scientist in charge of research in a medical institution, where the students have to carry out a research project as a part of their training.
   c. Directors (or their Deputies) from institutions, such as Public Health Laboratories, Research Institutes, specialized teaching hospitals and institutions, with an active research programme, relevant to health.
   d. A Senior Health Planner with responsibility for medical research.

ANNEX V

EXCERPT FROM THE REPORT[1] OF THE MEETING OF THE SCIENTIFIC GROUP MEETING ON LIVER DISEASES, HELD IN DECEMBER 1979, WITH IDENTIFICATION AND ASSESSMENT OF RESEARCH NEEDS AND THE PLAN OF ACTION FORMULATED TO MEET THESE NEEDS

"IDENTIFICATION AND ASSESSMENT OF THE RESEARCH NEEDS IN RELATION TO LIVER DISEASE

A. There was a consensus of opinion that attempts should be made to continue generation of reliable information on common forms of liver disease in the Region, using standard terminology and techniques. This information, from the Member States of the Region, should be periodically collected at a central place, collated, reviewed and disseminated.

B. Suitably designed clinical and epidemiological studies should be carried out to identify the aetiology of chronic liver disease.

C. Asymptomatic carriers of HBsAg, particularly in the younger age groups, should be followed up to determine the extent to which the carrier state is associated with emergence of chronic liver disease.

D. Studies should be carried out to determine the role of genetic differences in the development of the carrier state of HBsAg and chronic liver disease.

E. The susceptibility of pregnant women to hepatitis and the prognostic features of the disease amongst them should be evaluated.

F. The possible interactions between HBV and schistosomiasis, and between HBV and malaria in the causation of acute and chronic liver disease should be studied. It was

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[1] EM/SCP.GR.MTG.LIV.DIS./12
EM/RSR/11

emphasized that, due to the complex nature of this interaction, special efforts will be needed to design and implement such studies, so that the results are scientifically valid.

G. The infectivity of HBsAg carriers in the family environment and in other settings must be evaluated.

H. The importance of traditional (scarification and tattooing) and modern (vaccination) medical practices in the spread of HBV should be evaluated.

I. Prospective studies should be undertaken of post-transfusion hepatitis.

J. Studies to determine the frequency of perinatal transmission, and its long-term effects on infected infants with regard to the development of chronic liver disease, should be undertaken.

K. The incidence of HCC should be estimated and the importance of the suggested aetiological factors should be evaluated.

L. Properly randomised clinical trials for evaluating prophylactic and therapeutic interventions and for monitoring side effects of such therapeutic interventions should be performed.

The group felt that the standardization of laboratory techniques and criteria for diagnostic, clinical and histological diagnosis of various forms of liver disease was essential to ensure the implementation of studies on the above-mentioned topics along scientific lines and for generating comparable information from the different countries of the Region.

FORMULATION OF A REGIONAL PLAN OF ACTION TO MEET RESEARCH NEEDS

WHO EMRO should continue to foster and promote research in liver diseases within the Region.

The Ministries of Health in the Member States should be encouraged to establish multidisciplinary national committees for liver diseases, and to plan and to implement national programmes for research in liver diseases with a view to further define all aspects of these diseases and to monitor changes in infectivity, attack rate, and in results of passive and active prophylactic measures.

Collection of an adequate data base should be supported with special attention to the following three aspects:

A. Data collecting procedures, including:
   (i) characterization of the population from which samples are drawn;
   (ii) sampling procedure (e.g., random or specified criteria);
   (iii) use of proformas;
   (iv) quality control (e.g., observer variation); and
   (v) data analysis.

B. Standardization of laboratory techniques, particularly concerning serological markers of hepatitis.

   This implies:
   (i) provision of apparatus, reagents and reference material;
   (ii) training of doctors and technicians; and
   (iii) establishing reference centres for standardization of reagents and procedures, in collaboration with international centres (e.g., American Red Cross and Centre for Disease Control, Atlanta).

C. Standardization of nomenclature and diagnostic criteria concerning evaluation of liver biopsy material. This may be achieved by establishing regional panels of pathologists in close collaboration with interested clinicians.

WHO EMRO may assist in this development through use of existing reference centres, programming experts to visit each other, and by organization of national and regional workshops."

ANNEX VI

RECOMMENDATIONS OF SCIENTIFIC WORKING GROUP ON MALARIA[1] HELD IN NOVEMBER 1979 DEALING WITH RESEARCH

RESEARCH

A component cell dedicated exclusively to research and training should be an integral part of every malaria control programme.

A Regional Workshop should be organized on research methodology so that research field projects may be carried out according to recognized scientific criteria. It has been proposed to have such a Workshop during the year 1980.

RECOMMENDATIONS ON SPECIFIC RESEARCH PROJECTS

1. Epidemiology, epidemiological surveillance including sero-diagnostic studies.
   1.1 Sero-epidemiological studies should be made to detect residual immune response in areas of advanced control or eradication (Syria, Jordan, Lebanon).
   1.2 Sero-epidemiological studies are required in both nomadic and stable populations, using the immuno-fluorescent technique (Iran).

   For the purpose of carrying out sero-epidemiological studies (including ISA and ELISA) in the field, the continuous in vitro cultivation of P. falciparum will be established in Iran.
   1.3 Cost effectiveness studies should be made of active case detection and its comparison with other methods of surveillance (Jordan).
   1.4 A surveillance mechanism should be developed enabling the monitoring of the possible introduction of non-indigenous vectors (Cyprus, Egypt).

[1] EM/SCT.WRK.GR.MAL/16
EM/MAL/172

1.5 A search should take place for a practical methodology for the detection of symptomless parasite carriers entering areas which have been freed from malaria.

2. The Plasmodium

2.1 With respect to testing of P. falciparum for resistance to chloroquine:
the in vivo testing should begin immediately; and
the in vitro testing should begin as soon as the micro test has been sufficiently perfected to be used in the field.

A Regional course to teach the technique in vitro testing of P. falciparum sensitivity to chloroquine (Sudan) is required to enable the above field research.

3. The Vectors

3.1 Cytogenetic and possibly electrophoresis gene-enzyme studies should be made to discern the particular patterns of behaviour in the following anopheline vectors of malaria, in collaboration with the laboratory/laboratories especially equipped for this purpose:

3.1.1 A. gambiae complex (Sudan, Somalia, Saudi Arabia, Yemen and Democratic Yemen);

3.1.2 A. pharoensis (Egypt, Sudan);

3.1.3 A. superpictus (Iran, both desertic and mountainous);

3.1.4 A. sacharovi (Syria, Iraq, in comparison with the A. sacharovi population in Turkey);

3.1.5 A. stephensi (Iran, Saudi Arabia, Pakistan urban and Pakistan rural);

3.1.6 A. culicifacies (Pakistan, Yemen).

3.2 The effect of irrigation systems in rice cultivation on the bionomics of malaria vectors (Sudan, Egypt) should be determined.

4. Chemical Control

4.1 Studies are required to assess whether the alternate use of chemically unrelated insecticides may delay the spread of malathion resistance (Sudan).

4.2 Epidemiological assessment of the impact of malathion utilized in the emulsion concentrate formulation on malaria transmission should be made (Syria).

4.3 Trials should be begun to assess the epidemiological value of the application, during the winter, of ULV malathion by fogging operations (Syria, Iran).

4.4 Stage V/VI Field trials, as recommended by WHO, using the newer organophosphorous carbamates and pyrethroids insecticides should commence (Iran, Sudan).

4.4.1 Cost effectiveness trials of permethrin emulsion concentrate on malaria transmission, as compared with malathion, should be initiated (Syria).

4.4.2 Epidemiological assessment of the cost effectiveness of propoxur in comparison with that of malathion should be carried out (Iran).

4.5 Assessment of the safe use of the insecticides mentioned in 4.4 should be established.

5. Equipment

5.1 Simple hand or power driven equipment which would be used for clearing and cleansing canals should be tested (Sudan).

5.2 Various types of ULV fogging equipment and electrophoretic sprayers, which have been recommended by WHO for use in malaria control programmes, should also undergo testing (Egypt, Iraq, Sudan).

In connection with field research related to the equipment, investigation of the possibility of establishing a WHO collaborating centre for testing tools and improving techniques for the application of insecticides was recommended.

6. Antimalarial Drugs

Epidemiological assessment should be made of a cost effectiveness trial comparing

the effect on malaria transmission of Metakelfin prophylaxis, pyrimethamine prophylaxis, and malathion spraying, used respectively in adjacent epidemiologically homogenous areas of vivax malaria (Afghanistan).

7. Biological Control

7.1 The feasibility of utilizing local larvivorous fish in antimalarial programmes should be researched, identified and studied (all countries).

7.2 The epidemiological impact and cost-effectiveness of larvivorous fish in controlling malaria transmission should be investigated, namely, among:

7.2.1 Aphanius dispar (Oman);

7.2.2 Chinese Grass carp (White Amur) - Non-larvivorous, but affecting larvae habitat with its harbivorous habits (Sudan); and

7.2.3 Nothobranchius (Somalia).

7.3 Trials with mosquito pathogens, such as B. sphaericus, B. thuringiensis serotype 14 (Egypt) should be carried out.

7.4 Field trials of Insect Growth Regulators (IGR), using the methodology as recommended by WHO, are recommended (Egypt, Saudi Arabia).

8. Environmental Management (E.M.)

8.1 Studies to identify simple and inexpensive methods of E.M. using local manpower (community participation), material and equipment should be made (all countries).

8.2 Cost-effectiveness studies of E.M. in arid and semi-arid areas are required (Iran).

N.B. The SWG also recognized the need to establish environmental management as an integral part of Municipality Sanitation, and, in order to recognize E.M. more efficiently, a WHO-sponsored environmental collaborating centre should be established.

9. Community Participation

Assessment of the epidemiological significance of personnel protection measures against malaria such as wide-mesh bed nets or of normal mesh impregnated with

mosquito repellants or with insecticides, the use of pyrethrum coils, and partial proofing of houses against the entry of vector mosquitoes were recommended (Iran, Sudan).

10. Comprehensive Health Services

Alternative methods of malaria control, through the establishment of a comprehensive health service in Iran, in an area where control of malaria by the vertical antimalarial service has proved too expensive, were suggested for trial purposes.

11. Integrated Control

11.1 Studies on the methodology for detailed planning of integrated control in antimalarial programmes were recommended (Sudan).

11.2 Trials on a comprehensive approach to the control of malaria and schistosomiasis have been planned (Sudan).

ANNEX VII

EXCERPT FROM THE REPORT OF THE FIRST MEETING OF THE SCIENTIFIC WORKING GROUP ON DIARRHOEAL DISEASES[1], DEALING WITH RECOMMENDATION FOR RESEARCH

The group recommended that a research component for the Regional Diarrhoeal Disease Control Programme be established to complement the action-oriented implementation programme and respond to the operational needs of national diarrhoeal disease control programmes. The research component should include the following epidemiological studies and studies related to implementation, utilization and evaluation of national CDD programmes.

1. Epidemiological Studies

The group feels that epidemiological studies should be given particular attention and high priority especially as epidemiology is the essential tool for planning, implementation and evaluation of Diarrhoeal Diseases Programmes, through providing information on the incidence and aetiology of diarrhoeal diseases in different population groups.

The following areas of research were recommended:

1.1 Studies on the epidemiological pattern of diarrhoeal diseases under different ecological and cultural conditions particularly with regard to identification of children at highest risk.

1.2 Studies to identify the relative importance of aetiologic agents of diarrhoea (viral, bacterial and parasitic) in different countries of the Region. These studies should be carried out in conjunction with other related aspects, such as clinical features and sensitivity to anti-microbial agents with the objective of identifying

[1] EM/5TH.MTG.ACMR/11

possible correlation which can be used for clinical management.

1.3 Studies on the modes of transmission. Although they need rather sophisticated designs and laboratory support, the group feels that such studies should be undertaken as they will indicate possible intervention tools. These should be undertaken with the relevant Global Scientific Working Groups.

1.4 Studies directed towards development of simplified and reliable methods of surveillance of diarrhoeal diseases, in time for action, including simplified methods of identifying pathogens.

1.5 The association between malaria and diarrhoea which was recently observed needs further investigation.

2. Studies Related to CDD Programme Implementation

A number of research issues were identified that were felt to be directly related to implementation of national CDD programmes.

2.1 Strategies for Oral Rehydration Therapy

2.1.1 Complete Formula

There is universal agreement that the complete rehydration formula recommended by WHO/UNICEF is ideal for treatment and prevention of clinically apparent dehydration and that priority in all national CDD programmes should be directed towards delivery of the complete formulation to the mothers via the most efficient method throughout the national health services, using all available approaches (e.g., WHO/UNICEF type packets, cottage industry packets, etc.). Studies should be done to determine optimal methods for mixing preparation of the solution. In countries where paediatricians are still questioning the well-established safety of the WHO-recommended composition for use in infants, studies should be done again to demonstrate in a local situation the safety and efficacy of this solution in treatment of infantile diarrhoea.

2.1.2 Early Home Therapy

Studies are needed to determine the safest and most effective way by which mothers can give oral rehydration therapy at the household level early in diarrhoea. This includes comparative evaluation of the safety and efficacy of liquids readily available in the home (such as rice water, tea, egg albumin water, etc.), with special "Salt and Sugar" solutions made by different methods (e.g., domestic spoons, pinch and scoop, plastic spoons) and the complete formulation.

2.2 Approaches for Post-Diarrhoeal Rehabilitation

Three approaches have been used for post-diarrhoeal (nutritional) rehabilitation: hospitalization, nutrition rehabilitation centres and ambulatory treatment and surveillance. The relative cost-effectiveness of these methods needs to be compared under different situations. Related studies should also be done to determine the best means to ensure that locally available foods are best utilized for feeding during and after a diarrhoeal episode.

2.3 Pharmacological Treatment of Diarrhoea

In many countries anti-diarrhoeal mixtures and antibiotics are routinely distributed and used for treatment of diarrhoea. These should be evaluated for their efficacy and to determine whether a considerable amount of money can be saved to national health budgets by stopping the utilization of those drugs which prove useless.

2.4 Evaluation of Traditional Diarrhoea Remedies

A number of traditional remedies are used in different countries for the treatment of diarrhoea. These should be evaluated for their safety and efficacy.

2.5 Methods and Materials for Training

Research is needed into the attitudes and practices of medical and other health staff related to diarrhoeal disease treatment and prevention. This information should be used to develop training methodologies and materials for national diarrhoeal disease control programmes and should be used in evaluating the utility and benefit of the methodologies and materials so developed.

2.6 Sewage Treatment

Studies are needed to devise and assess low-cost technologies for treatment of sewage in the countries of the Region. These should include those looking at the dissemination of faecal pathogens through excreta re-use systems.

2.7 Economic Studies

A limited number of economic studies is recommended to be undertaken to demonstrate the potential savings from instituting oral rehydration therapy programmes and the alternative ways by which the delivery of oral rehydration can be linked with other health interventions and programmes such as the Expanded Programme of Immunization (EPI).

3. Studies Related to CDD Programme Utilization

In the area of CDD national programme utilization, two research areas were identified.

3.1 Beliefs and Practices

Information is needed on (a) - the inter-relationship between individual and family behaviour patterns of defaecation, water usage, food preparation, child hygiene and infant feeding practices and the risk of developing diarrhoeal diseases, and, (b) - the beliefs and practices followed in treatment of diarrhoea. This information should be based both on observed and expressed behaviour. The effect of established intervention programmes on diarrhoea-related behaviour should be measured. Standardized research designs should be used.

3.2 Breast-Feeding

The epidemiological characteristics of breast-feeding patterns in the countries of the Region and the impact of breast-feeding promotional programmes need to be measured. Reasons for lactation failures, in particular, need to be determined and ways of preventing and reversing these failures assessed. (It is recognized that this research area may primarily be undertaken by the Scientific Working Group on Breast Feeding being organized in the Region in early 1981).

4. CDD Programme Evaluation

It is recognized that national CDD programmes will be regularly evaluating their impact on diarrhoeal diseases mortality and morbidity and revising programme targets as required. These activities should not be considered "research" but rather as an inherent part of national programmes. However, there are two related research areas that are related to programme evaluation.

4.1 Survey Design

Some research is required to determine the best survey techniques for evaluating national programmes. This should include studies to determine how evaluation of other national health programmes (e.g., EPI) can be linked to evaluation of CDD programmes.

4.2 Environmental Health Impact Studies

It is anticipated that during the coming International Drinking Water Supply and Sanitation Decade, a number of water and sanitation development and improvement projects will be undertaken in the Region. In such circumstances the impact of these projects on diarrhoeal disease morbidity should be assessed, especially when they might provide answers to specific questions.

The group recommends close liaison between diarrhoeal disease control activities including research and the opportunities available within the International Drinking Water Supply and Sanitation Decade."

ANNEX VIII

RECOMMENDATIONS OF THE FIFTH MEETING OF THE REGIONAL ADVISORY PANEL ON CANCER, 8-9 SEPTEMBER[1] 1980

1. Strengthening of the data collecting base by improving its quality and coverage. The use of ICD-O classification by all centres in the Region was emphasized. Need for training programmes of clerical staff engaged in cancer registration work and clinical data management was proposed.

2. WHO should prepare guidelines for the countries of the Region planning to set up new cancer treatment facilities. These should cover such questions as the size of the population to be served, availability of trained personnel and cost/benefit analysis.

3. A more vigorous anti-smoking campaign was urgently needed as it was linked to a significant number of cancer cases occurring in males of the Region, cancers which can be prevented by curbing the habit. The need for social studies on attitudes to smoking was outlined and it was felt that some pilot studies on the effectiveness of a health education programme directed towards school children were required.

4. As cancer of the cervix is common in many countries of the Region, the need was felt to set up and/or extend the cervical screening programme. It was suggested that, wherever possible, the programme should be linked with the family planning clinics. More national and regional courses for training of cytotechnologists should be held.

5. A publication outlining the activities of the regional countries in the field of cancer should be started for dissemination of information.

6. Professional education in the field of oncology was felt to be an important need in the Region. It was suggested that a small booklet be produced for this purpose.

[1] EM/FIFTH.MTG.REG.ADV.PNL.CAN.PR/1

7. Emphasis was made of the need for cooperative studies on common cancers in the Region to be undertaken by the various centres.

8. Reprints of publications from the Region should be forwarded to the Regional Adviser for distribution and dissemination to all the Member countries.

9. Workshop for cytologists to be organized for uniformity and standardization of cytological interpretation to be held in Tunis.

10. Workshop for pathologists for standardization and classification and nomenclature of lymphoma to be held in Kuwait.

11. WHO will arrange training of personnel from this Region to enable them to establish steroid receptors in breast cancer in reputed centres.

12. Cooperative case-control studies in different centres of the Region on tumours of breast, cervix, bronchus, larynx, lymphomas and bladder to be started. Any centre having the requirements of such a cooperative study will be able to join it.

13. Establishment of more hospital-based cancer registries with WHO assistance in the Region.

14. Early detection surveys to be set up for cervical and bladder cancers with the help of cytology and urine esterase estimation.

15. Kuwait Cancer Registry to be critically reviewed and if found suitable, to be considered for conversion into a RRC for Data Collection and Analysis.

16. The Panel should be wide-based to include all specialties, the composition to be preferably of eight members.

ANNEX IX

WHO/EMRO SECRETARIAT'S PROPOSALS FOR RESEARCH IN THE FIELD OF MENTAL HEALTH

1. Further support should be given to the ongoing studies, particularly research strategies for the extension of mental health care and to the monitoring of mental health needs.

2. Special efforts should be made to enhance relevant training programmes and development of mental health research workers.

3. Appropriate inputs should be provided to develop collaborative research centres in selected countries of EMR.

4. Mental health research should be carried out in the following areas:
   (a) Epidemiological studies
      - studies on the prevalence of psychiatric disorders in defined communities (including comparative investigations of rural and urban communities, nomadic and settled populations, etc.).
      - surveys of mental health in samples of children with special emphasis on emotional and conduct disorders and bed-wetting.
   (b) Psycho-social studies
      - studies of migrant labourers
      - mass movement and human settlement.
   (c) Mental health services research
      - studies of long-stay patients
      - determinations of admission and re-admission into psychiatric institutions
      - use of long-acting (depot injection) in the management of psychiatric patients
      - the role of traditional healers in the delivery of mental health care.

ANNEX X

LIST OF BASIC AND BACKGROUND DOCUMENTS

Basic Documents

Provisional Agenda	EM/5TH.MTG.ACMR/1 Rev.1
Provisional Programme	EM/5TH.MTG.ACMR/2
Provisional List of Participants	EM/5TH.MTG.ACMR/3
Three-Country Coverage Study Agenda item 4(a)	EM/5TH.MTG.ACMR/4
Regional Course in Community Medicine and Health Services Research Agenda item 4(b)	EM/5TH.MTG.ACMR/5
Directory of Research Institutions in the EM Region Agenda item 5	EM/5TH.MTG.ACMR/6
A Preliminary Situation Analysis of the Research Manpower Situation in the Region Agenda item 6	EM/5TH.MTG.ACMR/7
Training Programme in Research Management Agenda item 7	EM/5TH.MTG.ACMR/8
Scientific Working Group on Liver Diseases held in Karachi, 17-19 December 1979 Agenda item 8(a)	EM/5TH.MTG.ACMR/9
Malaria Research Programme in the Region Agenda item 8(b)	EM/5TH.MTG.ACMR/10
Scientific Working Group on Diarrhoeal Diseases Agenda item 8(c)	EM/5TH.MTG.ACMR/11
Research in the Regional Cancer Programme Agenda item 9(a)	EM/5TH.MTG.ACMR/12
Research in the Regional Programme of Mental Health Agenda item 9(b)	EM/5TH.MTG.ACMR/13
Regional Biomedical and Health Services Research Priorities with Special Reference to "Health for All by the Year 2000" Agenda item 10	EM/5TH.MTG.ACMR/14

Basic Documents (cont'd.)

Progress Report on WHO Special Programme for Research Training in Tropical Diseases Agenda item 11(a)	EM/5TH.MTG.ACMR/15
WHO Special Programme for Research, Development and Research Training in Human Reproduction Agenda item 11(b)	EM/5TH.MTG.ACMR/16

Background Documents

1. REPORT ON A SCIENTIFIC WORKING GROUP MEETING ON MALARIA Nicosia, 27-29 November 1979	EM/MAL/172
2. REPORT ON A SCIENTIFIC GROUP MEETING ON LIVER DISEASES Karachi, 17-19 December 1979	EM/RSR/11
3. PRELIMINARY REPORT ON A SCIENTIFIC WORKING GROUP MEETING ON DIARRHOEAL DISEASES Alexandria, 19-22 August 1980	EM/SC.WG.DDR/5
4. DIRECTORY OF SELECTED INSTITUTIONS ACTIVELY ENGAGED IN BIOMEDICAL RESEARCH WHO EMRO 1980	
5. WHO SPECIAL PROGRAMME OF RESEARCH, DEVELOPMENT AND RESEARCH TRAINING IN HUMAN REPRODUCTION Geneva, December 1979	8TH ANNUAL REPORT