NEW TRENDS IN MATERNAL AND CHILD HEALTH

Report on a Conference convened by the
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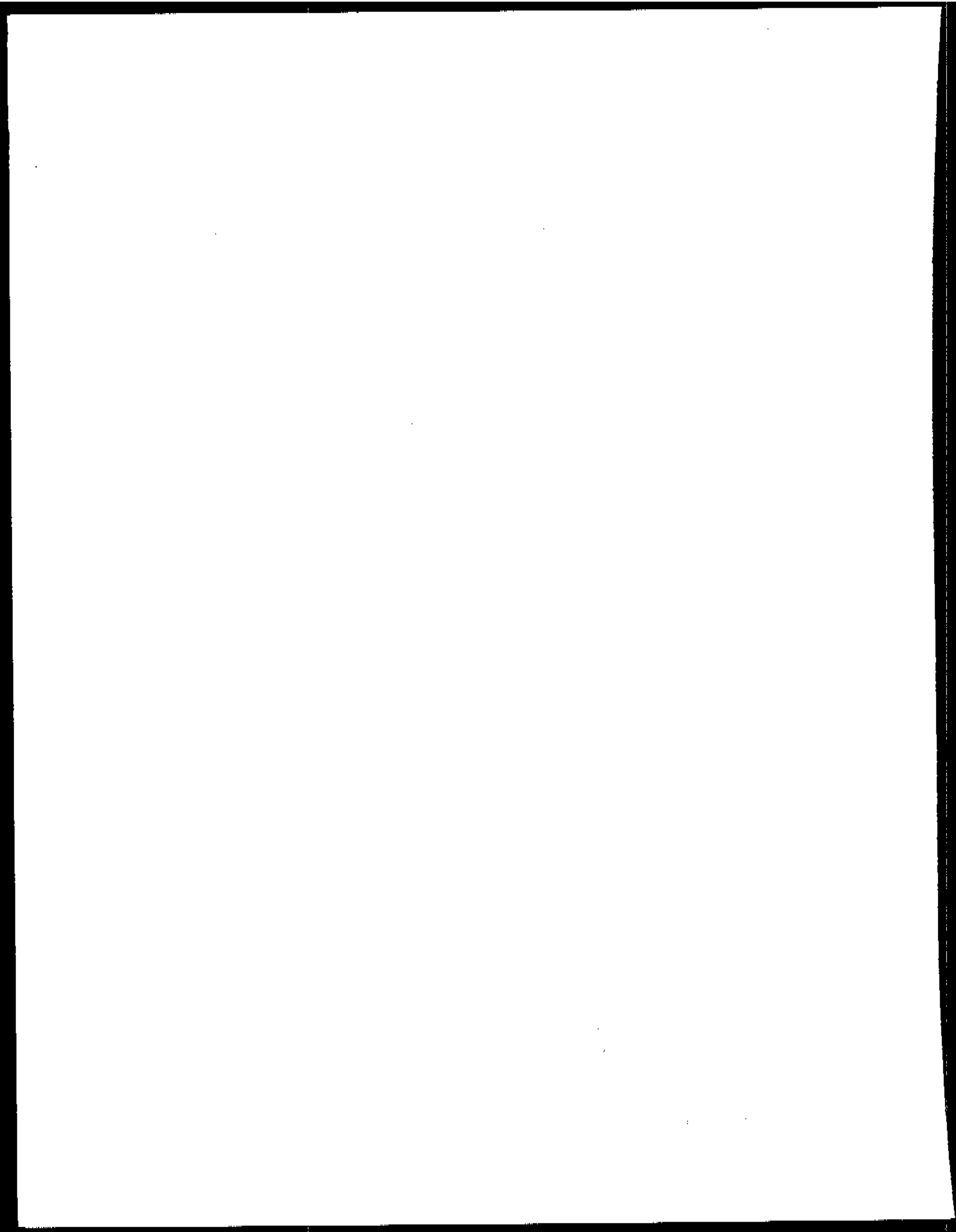

Note

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This report is also available in French and Russian.

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1. INTRODUCTION

Under the auspices of the WHO Regional Office for Europe, and in collaboration with the Government of the USSR, a Conference on New Trends in Maternal and Child Health was held from 11 to 15 November 1974 in Moscow.

1.1 Purpose and scope

The purpose and scope of this Conference was to permit a broad exchange of information about the current situation and trends in maternal and child health services, and emphasis was placed on modern techniques and the application of new strategies to the solution of all family health problems. Within this framework the broader aspects of family health were to be discussed, including long-term prevention of illness through education, the identification of high-risk groups by screening, the use of epidemiological and sociological methods and the development of information systems.

1.2 Previous WHO work on MCH services

From an examination of the past annual programmes of the Regional Office for Europe of WHO a considerable amount of commitment to the subject of family health can be inferred.

Until a few years ago a predominantly traditional line was followed, one which was preoccupied with the orthodox problems of preventive and curative medicine. In recent years, however, new perspectives have been acquired and the introduction of a social parameter into the consideration of health problems of the mother and child has been indicative of this change.

All participants had been provided with information, particularly on two recent conferences dealing with problems in this field.

The report of a working group concerned with evaluation of MCH services in certain countries of the Region,[1] gave some important definitions of basic concepts such as needs, demands, utilization, effectiveness, cost-efficiency and outcome, while the role of MCH services in family planning[2] was the subject of a conference, which revised and updated a

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[1] World Health Organization, Regional Office for Europe (1974) Working Group on the Evaluation of MCH Services in Certain Countries of the European Region, Copenhagen, 25-28 September 1973, Report, Copenhagen

[2] World Health Organization, Regional Office for Europe (1973) Conference on the Role of MCH Services in Family Planning, Ljubljana, 4-8 December 1972, Report, Copenhagen

description of the current situation in maternal and child health care, in particular with a view to family planning, and examined how these interests could be covered more efficiently by basic health services.

It was felt by the WHO Regional Office that this Conference had already revealed some important new developments, that the traditional concept of maternal and child care was still too narrow, and that there was a need for an even broader view of family health. Changes in our society, together with rapid technical developments, affect not only medical care in this particular field but also all aspects of the health of the family.

The Conference was attended by 38 representatives from 32 countries (including 4 from the Eastern Mediterranean Region), 15 temporary advisers, representatives of 4 international organizations, 9 observers from the USSR, German Democratic Republic and Finland, consultants and staff members of the WHO Regional Office for Europe and Headquarters. In this way it brought together public health planners, administrators in the field of family health and maternal and child health, officers responsible for maternal and child health at government level, leaders of MCH and family planning programmes and workers representing teaching and research in these fields.

2. THE OPENING SESSION

The participants were welcomed by Dr D. D. Venediktov, Deputy Minister of Health for the USSR. In his opening address he made clear his personal commitment to the health of mother and child. He considered efforts to improve the health of families a priority task for all Governments of Member States, and also for international bodies. In particular, recent demographic and medical changes were presenting new challenges to them, and all of these might be met if the spirit of the Rights of Man were properly applied to the care of the nuclear family.

In his speech of welcome and gratitude on behalf of WHO, Dr F.A. Bauhofer (Director of Health Services) reviewed the world situation with regard to the promotion of maternal and child health. Everywhere this appeared to be a complex and difficult matter, whether in the developing or in the developed countries. Governments were trying to remedy some of the difficulties through the United Nations and its specialized agencies, and child health services, including family planning and nutrition, had received high priority within the UN Development Plan.

A special UN Fund for Population Activities had been created and it was that Fund, supported by all the governments of the UN family, which

had financed the present Conference. WHO was naturally collaborating closely because of its concern with the most sensitive area in population programmes, namely family health and family planning.

Dr Bauhofer wondered, however, whether we were not becoming somewhat rigid in our approaches. Were we sufficiently responsive to changing needs? Family health and family planning presented many new challenges and some of them were the subject of the Conference. He referred to the problems of abortion, to migration, to rapid urbanization and to new ways of thinking about social and mental health, and ended by emphasizing that the Conference would not only review the present situation, but was requested to consider where gaps in preventive and curative services were likely to emerge in future, and how they might be filled. "Health", he reminded the Conference, "begins at home".

Professor Elena C. Novikova, Deputy Minister of Health of the USSR, was then elected Chairman and it was decided that she should be assisted by:

Dr P. Sigurdsson from Iceland;

Dr Alfreda Belhaj from Morocco; and

Professor L. S. Prod'hom from Switzerland as Vice-Chairmen.

Dr Elisabeth Funke and Professor E. M. Backett, consultants for the Regional Office for Europe, acted as Rapporteurs.

Dr M. Postiglione (WHO) acted as Secretary. He explained that the Conference would first examine the present situation, defining gaps in services and other problems, and then review the techniques and approaches now available which might assist our understanding and promote new strategies for their solution. Finally it would glance at the future and seek some consensus as to the nature of future problems and the role WHO might play in attacking them.

3. REVIEW OF MATERNAL AND CHILD HEALTH PROGRAMMES IN EUROPE

In opening this review, the Chairman pointed out the great and growing preoccupation of the Government of the USSR with services for mothers and children. In particular Professor Novikova drew the attention of the meeting to a number of innovations in MCH services in the USSR. Among these were a new focus on marriage hygiene, on genetic counselling, on the relationship between work and successful pregnancy, the continuous creation of new norms and, of special interest, a "sanatorium" type of care for

those with an abnormal pregnancy and the development of paediatric gynaecology for the early detection of gynaecological disturbances in childhood.

The Chairman was concerned that participants should see the legalized abortions in the USSR not as part of a demographic control programme but rather as a last way out when contraceptive family planning methods had failed. Introducing this abortion programme had not affected the birth rate in her country, a fear expressed by some other governments considering an alteration of their own abortion laws.

3.1 Diversity of services in the Region

As a guide to the general situation in Europe, two papers were presented. They were based partly on a survey recently carried out by the WHO Regional Office for Europe. Though only 18 out of all the countries in the Region submitted the information requested, some general conclusions could safely be drawn and these were confirmed in the group discussions.

In almost all countries MCH services stem from a long-standing tradition. This tradition has its origins in the simple health needs of mothers who need training in baby care, in the avoidance of malnutrition, anaemia, and rickets and in the control of infectious diseases. Considerable progress has been made and these achievements have been consolidated with the advent of chemotherapy and the antibiotics.

A rapidly changing society, however, with all the technical developments of modern life, imposes new burdens and these appear to affect the well-being of mother and child just as much as those of the past. The new social and environmental conditions under which the family exists affect the health of all its members. These social-adaptation problems, reflected for example in the varied and increasing disturbances of children, call for a certain reconsideration of traditional MCH approaches and emphasize the need for preventive measures on a broader basis particularly in the field of psychology and social behaviour.

The very great diversity of MCH services and programmes in the countries of the Region and the equally great range of maternal and perinatal mortality and morbidity were then reviewed.

3.1.1 Different historical developments and administrative structures

Obvious reasons for the different profiles were discussed. Some of them are due to different historical developments and administrative structures. Firmly established and long-standing traditions can be more of a handicap than a help, particularly when a new co-ordination and integration of all parts of the MCH services is sought. Countries with a strong hierarchical and centralized administration of services must be distinguished from those where a more decentralized pluralistic system with less well-defined responsibilities prevails.

3.1.2 Different priorities

The survey demonstrated that every organizational pattern is compatible with a reasonable quality of care, but the centralization of responsibilities - an organized service - offers a guarantee against low quality. Priorities in developed and developing countries must necessarily be different. In developing areas, health care is still mainly concentrated on the delivery of curative care and the control of the environment and this is easily understandable in areas where malnutrition, infectious diseases and malaria are still the main problems. But even these conditions reflect disturbances in the human ecological and socio-economic balance - a fact not always recognized.

In highly industrialized areas some MCH services present a different picture of organization and of priorities more congruent with the new challenges. Others, however, in spite of the new health problems of modern society, have remained unchanged.

High indices of illness and the increasing incidence of various neurotic disturbances among children, for instance, have not in these areas led to any adjustment of the services.

3.1.3 Different attitudes to family planning

These differences have a definite effect on the care extended to mother and child. Though it has been proved and, of course, generally accepted that fertility regulation will have a dramatic positive influence on family health, the development of adequate counselling services is still hesitant in some countries. This does not always reflect an overall low level of MCH services and must be attributed more to the socio-cultural and psychological background of the areas. Several speakers from these countries expressed the opinion that the possible side effects of contraceptives should be the subject of further studies before general recommendations are given to their populations.

3.1.4 Different attitudes to health information and statistics

The generation of health information and statistics is in some countries kept quite separate from health care and this - along with much misunderstanding - has led to a lack of interest in clerical accuracy and statistical information in general.

3.2 Gaps in the services in the Region

The WHO survey presented a tentative quality-of-care score derived from the total number of items of care included in each programme, the proportion of the population for whom this item is available and the proportion of the population who use the service. Such a score implies that the more varied the items which a service offers and the larger the number of people who use it, the better it is.

Deficiencies were obvious and occurred in most countries even as far as orthodox preventive and curative programmes were concerned. For example, 9 out of 18 countries in the Region report that home deliveries without any professional help still occur, only 7 countries provide a medical examination for all newborn children, and in 9 countries screening for phenylketonuria can be offered only to a minority of children. (It must be remembered that the countries taking part in the survey do not represent a random cross-section of the Region.) For children beyond the first year of life services seemed to be even less well developed than for infants. Only about one-half of the children in the age-group 2-5 years seemed to have access to any assessment of their developmental or sensory defects. School health services are still predominantly physician-centred, and in only a few countries are nurses, psychologists, social workers and dentists members of a health team.

As far as utilization of the services is concerned, the opinion expressed in the Conference confirmed that they are far too little used by those who need them most and that prevention through individual-at-risk strategies is far too little developed, and that this generalization is as true for pregnant mothers as for high-risk groups among children.

3.3 Gaps in the provision of up-to-date data

Gaps in the provision of up-to-date data and adequate health information systems for a proper assessment of MCH services were discussed, and many participants saw this as a considerable handicap.

In many countries there are independent data banks and special registers providing a number of traditional indices of family health, but the records for the same individual cannot be linked. Even existing health records are neither comprehensive nor uniform and the quality of the various data must often be questioned.

It was agreed therefore that the traditional data as collected at present were of little use for evaluating services.[1]

3.4 Gaps in planning, evaluation and priority decisions

Such gaps must be considered in part as responsible for present deficiencies. Proper definition of goals preceding efforts to fill these gaps has often been omitted and responsibilities at various levels of the services are often not well defined. It was agreed, furthermore, that goals are the subject of a continuous process of development and therefore need continuous reappraisal. Sometimes they are defined more by politicians than by health professionals. It was felt that only through close co-operation between both groups can there be any guarantee of an optimal result.

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[1] This refers to data on the consumption of medical care and, of course, does not apply to such indices as the proportion of the population immunized, etc.

3.5 Gaps in manpower and financial resources

Such gaps in manpower and financial resources were invariably mentioned as major difficulties when necessary changes were discussed. There were many countries represented where these shortcomings presented major problems. They are often aggravated by uncoordinated and irrational use of the available resources and by what appear to be wrong decisions on priorities. Highly sophisticated and expensive techniques for antenatal screening, for instance, should not occupy more attention and resources than simple, more frequent and less costly services for the implementation of regular and generally accessible maternity care.

Overlapping activities, particularly in countries with a high commitment to voluntary and non-governmental organizations which rely on public funds, reduce resources more than is justified by their results.

Manpower problems are often not so much the outcome of additional but rather of changing tasks. Many of the activities suitable for the responsibility of personnel other than physicians are still too much doctor-centred and therefore an alarming shortage of medical personnel is often described. The discussion on the implementation of family planning programmes in the Region, particularly with a view to assignment of responsibilities to midwives, underlined this problem.

Since training curricula for all health professionals in most countries of the Region still follow traditional patterns and no adjustments to changing needs have been made, the resulting deficiencies are obvious.

It was also observed that in those countries where medical services are largely private, resistance to change from the medical profession has often to be overcome, since a reduction of doctors' earnings is expected to result from most changes.

3.6 Gaps in research

These gaps still leave unanswered many questions about the needs for, and characteristics of, an optimal MCH service. Little is known in different cultures about the long-term effects of social and environmental factors on the health of mother and child. The health hazards of malnutrition in infancy and childhood and their relation to diseases in adult life were mentioned as an example.

Some participants were hesitant about advocating family planning services in their countries since they felt that more research on the control of human reproduction and its sequelae was required before general programmes should be implemented.

Child and adolescent gynaecological services are only just about to be developed in some countries and still require further research.

3.7 Gaps in the implementation of research findings

In many countries these gaps are still large. Advances like the better understanding of reproductive physiology and its effects on health, of embryology on organogenetics, of prematurity - its causes and care, and of physiological and psychological development of the child within the family have not resulted in appropriate changes in concepts and practice in the field of family health.

Relatively simple implementation such as services for phenylketonuria screening was shown in the WHO survey to fall far short of expectation.

3.8 Gaps in the level of health knowledge

These gaps, of all kinds but particularly in family health, were a major deficiency reported from most countries of the Region. This may be more serious in developing countries where it is part of a major educational problem. Special areas of health knowledge, however, show a surprisingly low standard even in highly industrialized parts of the Region. Here there are major deficiencies in popular understanding of, for example, family planning, the long-term effect of overnutrition in infancy, personality development and behavioural disorders.

4. OUTSTANDING PROBLEMS - A SUMMARY

From the reviews of the diversity of services and the gaps which were reported in the services for mothers, children and families in the Region it is possible to point to a number of contemporary general problems. Some of these, for example the lack of evaluation and innovation or a refusal to recognize some of the more important psychosocial problems of the family, may be cultural or historical in origin or due to the system of medical care itself. Many therefore will probably continue unchanged and will be mentioned again under "The Future" (Part 7). Others, perhaps more amenable to solution, arise from changes in the social and medical scene.

4.1 Keeping abreast of changes in the patterns of disease

These changes in the medical needs of families have been dramatic in most countries of the Region. Not only has there been the well-known decline in infectious-disease mortality affecting the majority of the population in the Region (and of course mostly in children) but the ill health which remains (and which is sometimes increasing) presents a more subtle, multifactorial challenge. There is therefore an inevitable preoccupation on the part of the caring professions with disease and ill health which is now proportionately more important than before. Priorities are changing.

Congenital malformation, mental handicap, the cancers, various forms of maternal morbidity associated with excessive and frequent childbearing and juvenile delinquency were among those mentioned.

4.2 Problems arising from our ability to predict disease, intervene in illness and in reproduction

These skills bring not only new dangers (such as those of thrombosis from some chemical contraceptives or teratogenesis from some drugs) but force us to consider the complex problems of screening, the specificity and sensitivity of our screening tests but above all, the costs and benefits of our intervention. When to intervene becomes more important and, since intervention must only be considered for those at risk, risk categorization becomes essential. From the risk categorizations come the High Risk Strategies (or plans for intervention) which were mentioned so often by the participants. Changes in our ability to intervene in reproduction force upon us new and very important psychosocial problems as well as the problems associated with the acceptance of new methods.

4.3 The problem of human behaviour and health

It seems likely that as mortality declines so society has the time and the inclination to consider the subtleties of morbidity. The Conference returned repeatedly to these notions and particularly to the quality of family life, and the satisfaction of the aspirations and demands of the consumers of medical care.

4.4 Problems arising from our ability to evaluate medical care

The description of need and our ability to measure the effectiveness of services (and thus to decide on national priorities) is only just beginning but, nevertheless, must be regarded as an important starting point for innovation and change and a major problem in medical care. The need for "end points" or measures of outcome ("health indices") was frequently referred to, as was the hostility to all forms of audit of doctors in some countries.

4.5 Examples

Individual examples of the problems discussed by groups under subheadings 4.1 to 4.4 above are given in Annex I.

5. SOLUTIONS - A TENTATIVE APPROACH TO THE INFORMATION NEEDED

5.1 Introduction

Among the many contributions which are possible to the solution of contemporary problems identified in the Region, three were scrutinized by the Conference with some care. These were (1) the psychological and sociological contribution, (2) the epidemiological contribution and (3) the contribution from new information systems and the linking of data about families and individuals. Other highly rewarding approaches, such as the application of new management methods (including systems analysis and model building, operational research and cost-benefit analysis) were mentioned but not considered in detail. For the sake of completeness they must, however, be considered in any comprehensive attack upon family ill health. The new approaches chosen, therefore, were illustrative examples only and in no sense a complete review.

5.2 Recent advances in the understanding of social and psychological factors in family health

By far the most important, and to some the most interesting, recent developments in our understanding of reproductive performance and child health have come from the demonstration of the relationship (not necessarily causal) between conditions in the foetus and young child (for example nutritional and other lack) and much later inability to realize full intellectual or physical potential. Furthermore, social deprivation and disadvantage (the familiar poverty complex in a new and sophisticated guise) also have their long- and short-term sequelae. Social disadvantage is today associated not only with poverty but also, often, with a particular life style. Not the least important of these associations is with high perinatal mortality and morbidity, high still-birth rates and many other features of poor reproductive performance.

The socially disadvantaged mothers are at high risk owing to a number of other features of family life associated with ill health; they smoke to excess, they are less easily persuaded to seek early care for many chronic ills, they avail themselves less of the services they need most - for example, family planning or antenatal care, and they are poor attenders at child health clinics and cervical screening programmes.

Poorer health and physique is found more often in this group than in the more socially advantaged and their children are more handicapped by any birth damage or malnutrition. Urban isolation may compound these effects. The social environment of the young child within the extended family has probably been supporting and fairly constant for a great many generations. In highly industrialized societies much of this security is being disrupted and new life styles are emerging which may challenge the security of the growing child. The effects of these changes are not fully understood though it is known that disruption of family life has a number of serious effects upon the later social and psychological health of the child.

These few examples served to show the growing preoccupation of social research workers, paediatricians and obstetricians with the interaction of physical, social and emotional factors governing the health of the family. It was suggested that WHO might well act as a "clearing house", collating and disseminating further advances in this field. The spread of such information in the Region might, in the long run, contribute to the solution of some of the outstanding problems identified at the Conference.

5.3 Recent advances in epidemiological and population studies of family health

Since so much of family health is concerned with the relationships between antecedent events and later illness or death - antenatal diagnosis and poor reproductive performance for example, or early nutritional deficiency or excess and later subnormality or obesity - the long-term study of what happens to children over a number of years is of major importance. Other examples of our need for a better knowledge of the long-term natural history of disease or impairment abound: the social, individual and family cost of a surviving handicapped child for example, the effectiveness of the newer contraceptives, their dangers and the dangers of teratogenesis from new drugs, the reasons for regional and temporal variations in congenital abnormality and the suggestion that some chronic diseases of middle age may have their origin in childhood all call for population studies of growing sophistication.

The recognition of associations, for example between high perinatal mortality and a number of antecedent social, physical, pathological and psychological characteristics allows of the development of risk scores (either elaborated ad hoc or based upon some variance analysis techniques). These risk scores will help to distinguish some high-risk families as specially vulnerable and allow of the development of counter measures (or High Risk Strategies) prior to the event predicted.

These applications of epidemiology to the prediction of illness are an essential basis for the future preventive medicine of the family as well as, of course, good obstetrics. The extension of these techniques to cover a wider area of risk (including social risk) is an urgent matter.

The meeting drew attention to other "risk" areas which could be quantified. Among vulnerable groups were the socially disadvantaged already mentioned, the recently urbanized, the nomads and migrants, as well as the isolates, and of course those intellectually handicapped. Physical and pathological high-risk factors were well known but another concept of high risk was attached to a particular period (sometimes only a few hours) in pregnancy and to certain places where risk was related to defective services. It was suggested that WHO could help greatly by dissemination of information about relative risks (it was, of course, recognized that risks will be different in different countries and areas but not, perhaps, so different as to be of no value) and High Risk Strategies as well as in the exchange of information about the "longitudinal" studies of family health which are under way in the Region.

Another example of the use of epidemiology and population methods is in the evaluation of family care. Evaluation is normally thought of as having two main components: effectiveness, or how much the medical care achieves of what was expected of it (does it do what it set out to do?) and cost-efficiency or the conservation of resources. It is a way to decision-making and to priority formulation.

Since many of the gaps in services described by participants seemed to them to be due, in part at least, to defective priorities and social policy or the irrational use of resources, it was clear that the evaluation of services would be helpful. Part of the evaluation system must, of course, lean upon the "outcome" of medical care, and a constantly recurring theme throughout the Conference was the need for new measures of "outcome". These indices or measures of health were sought because of the inadequacy of mortality statistics to describe the health of children and of the family. It was suggested that WHO would do a great service in the Region if the current work on health indices could be circulated.

5.4 Recent advances in information systems and the linking of data

This is a much discussed field of endeavour and WHO has helped recently by co-ordinating the experiences of several groups.[1] From the point of view of the Conference, with its interest in the reported deficiencies in services, in the solution of present Regional problems and in speculating about the future of services for the family, the development of efficient information systems was recognized as crucial. However, in spite of this recognition of the importance of good records which can be collected, stored, retrieved, processed and distributed and which enable all the information about a family to be linked together, participants were still reserved in their praise. It was clear that pressure of time, the lack of understanding of why some material is collected and the problem of confidentiality still impede the full exploitation of the new information systems.

When to these doubts are added the fact that many expectations of, for example, "at risk" registers, have not been realized (and there is still a widespread suspicion of computers in medicine among clinicians), it is obvious why there has been so much delay in these developments.

With these doubts as a background, the Conference agreed that a good health information system in which the data could be linked together (preferably, but not necessarily, automatically) was essential to the early recognition of disease and therefore to successful intervention.

At the individual level there was a call for continuity of care and a unique record for each child for at least 18 years as well as the

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[1] World Health Organization (1974) Working Group on Information Systems Development, December 1973, Report, Geneva

co-ordination of fragmented services. These advances were possible only through the use of an advanced information system.

At the service level the Conference's call for evaluation and innovation could hardly be realized without a health information system which could accommodate measurable demographic, medical need, demand, utilization and outcome data. At the research level, since so much of family health depends upon a detailed record of antecedent events or conditions, all longitudinal studies must lean heavily upon efficient information systems.

Finally, since many speakers were concerned to establish surveillance systems (i.e., the review of populations prior to the onset of illness or a crisis within an existing illness) it was recognized that both computers and linked information were necessary. It was hoped that WHO would continue to disseminate reports on recent advances in medical information systems relevant to family health and thus contribute to the solution of the outstanding problems (see under 4.1, 4.2 and 4.4).

6. STRATEGIES - OBJECTIVES OF FAMILY HEALTH CARE AND EXAMPLES OF PLANNING

6.1 Introduction

The notion of a "strategy" in health care is one of planning for future intervention. The Conference was concerned not only to review gaps or omissions in the health care of the family and some of the new approaches, but also to discuss and agree on the objectives of new strategies and consider a few of the achievements of the services known to the participants.

There was much discussion of the many different systems whereby medical and social care is delivered to the family and from these discussions a series of common features - "aims", "goals" or "objectives" became clear. Only in one or two cases was it possible to say that these objectives had been achieved, but it was felt that, unless the main features of an "ideal" system were recognized, the appropriate strategies were likely to remain intuitive and perhaps ineffective.

There is a similarity in the objectives of all health care delivery systems and there is also a temptation to dismiss the more utopian as unrealistic. However, a review of the changing patterns of care of the last few years shows at once the folly of such an attitude. Changes have occurred rapidly in some countries; an infant mortality rate of 10 and a perinatal mortality rate of 17 per 1000 were, as little as five years ago, thought to be "unattainable". With this in mind, the Conference agreed that the planning of the health care of the family might have some or all of the following "objectives".

6.2 Agreed objectives of a family health strategy

6.2.1 Access to care

It follows from the recognition of the ecological or interrelated nature of factors influencing family health that, to have its maximum impact, access to care must not be impeded. Further, it follows (though this is more an article of faith than something supported by research findings) that either all members of the family should have the same source of care or that records from each should be available to the health care team treating the others. It was, of course, recognized that a major impediment is often the attitude of those most in need. Universal access is therefore not enough and positive incentives are needed - especially with high-risk groups.

6.2.2 Comprehensiveness

Since the optimum care of the nuclear family is largely preventive, the separation of preventive and curative care (as is still a feature of some systems) is self-defeating, costly and probably ineffective. Similarly, educational and social care is probably more cost-effective if combined with other aspects of the health maintenance of families. Fragmented care from four or five different agencies (including special programmes and voluntary agencies) is still a feature of some systems.

6.2.3 Cost-efficiency

Very large resource differences (particularly in manpower) were described in different countries of the Region but in no case was it possible to afford to neglect the constraints upon their use. Strategies, it was agreed, must respect increasingly the need to operate with high cost-effectiveness. This is likely to be particularly important when fashionable and relatively ineffective programmes, costly in manpower resources (such as some screening, for example), are embarked upon.

6.2.4 Effectiveness

It was agreed that some medical care of the family was demonstrably ineffective. An obvious objective for new strategies would therefore be to increase this effectiveness. Two problems, however, present themselves: first, the measurement of effectiveness is difficult, and second, the increasing power of the consumer - welcomed by all participants - may well lead to an insistence upon ineffective but acceptable care.

6.2.5 Continuity of care

With the growing preoccupation of workers in family health with the long-term effects of the care of the nuclear family, continuity of care becomes of greater importance. Linked data or, preferably, the actual continuity of personal care was a clear objective. The records needed for the former and the personal doctor or health professional needed for the latter

are difficult for the family to acquire in many Member States. Continuity was, however, given high priority in considering the objectives of the new strategies.

6.2.6 Research

The "underpinning" of a family health strategy by research - even very elementary research - was considered of great importance. The conflict, which was often reported, between what is known intuitively and what is known scientifically is real and, with the new subtleties in maternal and child health, more locally acquired scientific knowledge is needed. By any criterion this kind of research is socially justified because the social costs of, for example, the handicapped with normal life expectancy are high. It was felt by some participants that so-called "fundamental" research was still consuming too many resources; research into how best to deliver care was now among the highest strategic objectives.

6.2.7 Health manpower

This subject is mentioned later in this report but the Conference placed great value on new uses (roles, functions) of health manpower. An effective strategy for family health would have as one of its objectives new uses as well as new training methods for members of the health care team - a team whose roles are, in some countries at least, bound by tradition, status and by irrelevant financial considerations.

6.2.8 Humane and compassionate administration

So complex are the attitudes and motivations described as conditioning the health behaviour of families that exceptional tolerance as well as an "anthropological" expertise is needed. This is much more than the humanity and compassion clearly considered as a component of a successful strategy and involves the social-science content of the curricula of all health professionals.

6.2.9 Consumer participation

This subject recurred several times (and therefore its mention may seem repetitive) but in terms of the objectives of a new strategy it was clear that the participation of the consumer is increasingly important. The contribution of the "clients", both to the organization of care and to the problems of communication with health professionals, was essential.

6.2.10 Illustrative examples

To what extent social strategies can influence the effectiveness of health services was demonstrated by a participant from Finland, where large rural areas with long distances to private doctors and health centres are a particular cause for concern. Legal regulations permitting substantial maternity benefits for mothers provide that only those who have been subject to a screening examination by a doctor or a midwife before the end

of the fourth month of pregnancy are entitled to these allowances. Though the benefits do not involve large sums of money (and as an alternative consist of a practical "present" such as a set of clothing for mother and child), they turned out to be an essential stimulus to optimal utilization of maternity and child care services. This could be raised from 11% before the implementation of the law to practically 100% afterwards (in 1973). The positive effect could not only be demonstrated by the contact with all mothers, but also by a contact at an earlier stage of pregnancy and an increase in the number of average visits to health centres during pregnancy. At the same time, long waiting-hours for mothers, which had often affected their personal commitment to health services, could be avoided by a different appointment system. An active interest in health matters is sustained by additional social contributions like compensation pay before and after delivery, when again the granting of the maximum rate of benefits depends on a special postnatal examination.

There is an increasing involvement of fathers in maternal training programmes, demonstrating the family approach of Finland to MCH care. This interesting strategy must obviously be seen in the comprehensive frame of developing social policies, and for example in the provision of day-care facilities, crèches and kindergartens, financial allowances for children, and some flexibility in working hours for mothers, all of which are designed to support the growing family.

The technical strategies presented as examples to the Conference were from highly developed countries. They described screening techniques that could be applied to high-risk groups of mothers. In early pregnancy screening procedures are, of course, directed towards the detection of maternal infections and congenital malformations, if necessary involving amniocentesis and ultrasound examinations. Genetic and metabolic defects can also be diagnosed at this time so that an affected pregnancy can be terminated safely. Expensive and highly sophisticated methods should be limited to high-risk groups such as elderly mothers (for chromosomal defects) and to women with a history suggestive of specific disorders.

In late pregnancy, screening is not only concerned with the elimination of perinatal mortality but also, of course, with the delivery of a healthy and undamaged foetus and with the general health of the mother.

This ideal is, in general, sought in two ways:

(1) the identification of foetal and maternal risks with choice of optimum delivery time;

(2) the avoidance of intra-uterine death or damage by monitoring the foetal state until the optimum moment for delivery (measurement of foetal and placental function by ultrasound, hormone and enzyme estimations, cardiotocography, etc.).

Highly organized services for children were outlined by another speaker from Finland. In this country all or nearly all children are screened and the screening procedures include:

- growth control by standardized charts;
- tests for sight, hearing, speech and psychomotor development;
- urine and haemoglobin tests and
- observation of the development of mental capacities and school maturity including emotional behaviour and development.

Special attention is also given to defined risk groups:

- small-for-date and premature babies;
- newborn babies with abnormal findings during their perinatal stage;
- children with chronic illnesses and frequent infections or with nutritional disturbances;
- the handicapped in motor and mental development or in sight, hearing and speech;
- children with emotional problems; and
- children whose day-care is inadequate.

Doctors, public health nurses, dentists, psychologists, dieticians, physiotherapists, speech therapists and social workers are all regular members of the basic health care team.

Another interesting development was reported from Poland, where the age-group 14 to 19 years has been included in MCH services. This has led to a remarkable development in adolescent medicine with special psychological counselling and the growth of occupational consulting centres. The problems of "child gynaecology" have become a special part of the expanded MCH services in this country.

6.2.10.1 Examples of strategies involving the consumer

How the social distance and consequent lack of communication between consumers and providers of services could be overcome was demonstrated by some observations from the United Kingdom.

Since the attitude of mothers and young children to services largely depends on the traditional attitudes of near relatives, these have to be persuaded to accept a modern approach to maternity and child care. An attempt has therefore been made to win the co-operation of the older generation first, and to educate them in all questions relevant to MCH.

Particularly in the high-risk groups, there is great scope for experimentation and assessment of alternative approaches, such as the use of personal teachers or neighbours who may share similar experience and know the local attitudes and dialects. The mass media have also proved useful but while programmes on disease, even those prepared for professionals, draw large audiences, there is sometimes stubborn prejudice against a "positive" attitude to health. The example of pressure groups against fluouridation was given in this connexion.

Since the prevention of disease and health-maintenance are likely to require constant effort or some special activity, for example, regular exercise, immunization, teeth cleaning, etc., constant repetition, presented in a variety of imaginative ways, is necessary in order to keep interest alive. The mass media as well as lectures, leaflets, press exhibitions, etc., have been used but rarely evaluated.

A growing interest in health can be concluded from the variety of consumer groups. Some of these are true pressure groups (e.g., Abortion Law Reform Association); others are essentially service groups (e.g., the British Family Planning Association) and there is also an interesting proliferation of self-help groups, among them many women's organizations.

A wide range of official and voluntary organizations see their commitment in helping certain special groups of people: the handicapped, the mentally ill, the desperate, the socially deprived or the stigmatized (unmarried mothers, ex-prisoners, etc.).

How parents and in particular mothers, can themselves be involved (with professional guidance) in the care and rehabilitation of the handicapped and thus improve the effectiveness of the services and also satisfy themselves was shown by speakers from Poland. This need for "consumer" involvement was of growing importance, for whereas the patient is obviously concerned with the amount of professional help available, this may not apply to the same extent in preventive medicine. The psychological dangers of an over-active and professional preventive service leading to passivity and a lack of response from the population was pointed out by a speaker from France.

There were many comments from participants as to what extent the consumer of health care should influence official health policies. It was generally agreed that their contribution was important, particularly in the assessment of needs and demands for medical care. However, the consumers' role in executive decisions was fraught with danger because of the possibility of an irrational use of pressure groups and the distortion of priorities.

An example of administrative strategies used in a developing country was given by a representative from Morocco.

Planning for the near future has been preceded by a careful study of prevailing medical problems as well as the manpower and financial means

available. It was decided that special health services for children should focus on the most vulnerable age-group of 0 to 2 years when mortality rates are at their maximum in Morocco and there are grave health hazards caused by malnutrition and infectious diseases. From this age on, health care can be provided by the general and school-health services.

Activities therefore concentrate on combating protein deficiencies and rickets and upon immunization and family planning programmes.

Since medical personnel are not available to the same extent as in most of the more developed countries, other members of the health team have largely been put in charge of health services for mother and child and their training is adjusted accordingly. The general development of children, as well as the course of pregnancy, are followed by them to the point when clinical signs present a need for further diagnostic measures and treatment by a doctor. Counselling in nutritional problems and most of the vaccination programmes are handled in the same way.

Financial means are likely to be put at the disposal of those requesting them only on the basis of simple but convincing cost-benefit comparisons. Evaluations of the services and their influence on child health, of the demands of the public and of the techniques applied by all groups of personnel are supported by a basic information system which allows continuous monitoring and thus adjustment of health programmes.

7. THE FUTURE

7.1 Introduction

The Conference, having reviewed the present unsatisfactory situation of family health in the Region and after a brief discussion of some new approaches and the listing of planning objectives, turned to the future. At this point, and to complete the logic of a review of the whole problem (albeit very generally, for a conference of this breadth can do no more) a number of "areas of major concern" for the future were defined. Inevitably some of these - fertility control, for example, had already featured as profound problems throughout the Conference: they were "areas of concern" in the past and the present, and would certainly remain so into the foreseeable future. In this part of the Conference, however, they were scrutinized in a new light and an attempt was made to forecast from current trends the nature of the future challenge.

The criteria for selection of areas of future concern - the emerging challenges - were four.

(1) the future importance - the seriousness of the challenge,

(2) its extent, "universality" or prevalence,

(3) its "treatability" or "preventability", and

(4) its crucial relevance to the progress of the whole of family health.

These then were the challenges threatening continued improvement in health and upon the resolution of which the future of family health might be thought to rest. They are also in a sense the major research challenges and, though crucial to the future, are also present-day problems for some, but not all, of the countries in the Region.

As a background to the consideration of the future challenges in the field of family health, two features of the conceptual framework into which they must fit were discussed. Both are important and both are in a sense challenges themselves.

7.2 The family as an ecological unit

It is fashionable to use the terms "ecology" and "systems analysis" to describe present-day concepts of the multifactor causation of disease. However, in spite of fashion, these notions are extremely useful when the fine balance of social, physical and psychological (particularly cognitive and emotional) factors in family health are considered. There is growing evidence, much of it derived from large-scale research, of the interrelatedness of variables affecting, for example, the outcome of pregnancy, the genesis of delinquency, or the marginal cognitive retardation associated with malnutrition or birth trauma. The notion of an ecosystem - a system of interrelated balances - is therefore of value in that at its most simple it informs workers in family health that all changes within the family will have a host of repercussions - some of them predictable. At its most sophisticated the use of the notion will point to the kind of analytical techniques likely to be needed in research.

7.3 The congruence of needs, demands and services

The idea that the family has a series of medical and social needs and that some of these are recognized by the family and thus become demands for services is not new. Further, it is a generally argued objective of the organizers of care that the more important needs and demands (though more often the needs only) should as far as possible be met by the provision of services. The "ideal" situation however, is one in which there is almost no incongruence between the three - almost all needs and demands being met by the services provided. The more common situation is one in which needs and demands show some partial agreement and services are capable of meeting some of these needs and some demands, but not all.

A large overlap between the needs of populations and the services designed to meet these needs is, of course, to be aimed at, but it challenges the medical care team to educate the family so that their demands more nearly reflect their needs.

A large overlap between needs and demands suggests a well educated, highly sophisticated population, but where services are deficient consumer pressures are likely to build up and will, it is to be hoped, provoke the reorganization of services.

A situation in which there is much overlap between service provision and demand, but where these are unrelated to need, is found today in several countries of the Region. This situation is perhaps the most threatening from the point of view of family health for it implies that few of the great scientific advances in the understanding of medical needs have influenced either demand or services. The population is likely to be satisfied and indices of family ill health (at least those affected by care) are likely to be high.

The main challenge for the future can therefore be said to be the incongruence of needs, demands and services and the future task in family health may be seen in this way.

7.4 Emerging challenges

Apart from the major challenge of the incongruence of needs, demands and services, eight other areas of concern were defined.

7.4.1 Implementation of existing knowledge

It was agreed that, since in some areas of the Region long-established and common knowledge about the care of the family was not being applied, the first task in these areas was to implement this knowledge.

7.4.2 Demographic challenges

The low and declining birth rates and consequently the changing proportion of old and young in the populations of the Region carried with it major financial and social problems of dependency. However, in some areas in the Region there is still a large annual population increase and the Conference recognized these two contradictory challenges as being of great importance. The planning of families was still among the two or three most important cornerstones of maternal and child health.

7.4.3 Fertility control

Arising from the ability to control fertility are not only challenges to improve and make safer contraceptives, to ensure their acceptability and particularly to have them accepted by those most in need, but the more positive challenge of the wanted child. The unwanted child is clearly disadvantaged (or may be born into a disadvantaged family) and thus begins

cycle of dependence and ill health which can only be avoided by responsible family planning. The nature of these challenges is, of course, in the first place biochemical and thereafter educational and sociological.

7.4.4 Quality of life

Much that is vague has been written on this subject but the facts are unassailable. Life-support systems have now reached such a high level of efficiency that there is an increasing chance of the survival of the handicapped. Some decline in the incidence of handicap has not substantially lessened this challenge. There are many other children who, with the relaxation of competitive survival pressures, now have "normal" expectations of life. The quality of this existence is considered to be a medical as well as a social challenge.

7.4.5 Developmental potential - the child and the adult

The expanding idea of the developmental potential of the child is another challenging notion which needs much careful research to document. It is true that recent findings suggest a much larger pool of ability in a population than hitherto believed, but it remains to be demonstrated how diverse are these potentials and how they may best be realized. More securely based are the long-term associations of disease. Obesity, some mental ill health and personality disorders, some cardiovascular disease, some of the cancers, perhaps some metabolic disorders and some of the accidents which are due to poor risk-taking probably have their origins in childhood.[1] The elucidation, detailed description and quantification of the associations, coupled with careful prospective observation is a major challenge to family health research for it is possible that some of these conditions are preventable at a very early age.[2]

The prevention of the effects of genetic abnormalities presents a similar challenge (the genetic effects themselves presenting a eugenic counselling challenge) and the long-term effects of a number of other environmental assaults must be quantified so that they can be avoided.

7.4.6 The measurement of health and its use in evaluation

The traditional parameters of mortality and morbidity are of decreasing interest to those concerned with family health, and in their place are a

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[1] The list is not, of course, exhaustive and there is informed speculation about many more conditions characteristic of adult life.

[2] Proper risk-taking learned in early childhood, for example, could well alter the pattern of accidents later in life. The other conditions mentioned show secular changes in incidence which automatically involve the environment and suggest preventability.

few rather inadequate descriptions of what is sometimes called "positive" health. The search for sensitive, repeatable indices of health in which the socio-economic components can be distinguished from those sensitive to medical care is a major research challenge. "Adjustment", "fulfilment", "ecological balance" are little more than literary attempts to describe much needed measures. At least one member of the Conference had considered the measurement of disability from various types of handicap as a step toward the objective of easily applied repeatable indices of health.

The use of indices of health as measures of "outcome" would, if used with the new information systems (above), allow of the full development of what one participant called "the predictive medicine of the family". Our crude risk registers would thus be made more sensitive and accurate and their value in health care (at present rather low) correspondingly enhanced.

7.4.7 The environment of the future

Particular importance was attached to the changing environment of the family. The Conference had discussed the interrelationships of the social, psychological and material environment and was concerned that constant attention be paid to the prevention of all ill effects. For example, it was apparent that concern for the welfare of the family as a nucleus was in some countries of the Region being taken so far that all responsibility for its well-being was being removed from the family's own control. Thus there was a striking paradox: the increasing concern of society for the family was in the end actually threatening to damage the self-confidence and perhaps the resilience of the very family it sought to help.

At the social and psychological level there were also the potential threats involved in the changing patterns of family life - the one-parent family being a familiar example. The challenges of the environment were among the most complex, and at their most sophisticated they were research challenges. It was necessary to monitor and in turn control the effects of the new patterns.

Monitoring too was necessary at the more traditional level of air, water and food pollution, where dramatic changes were also likely and new hazards were emerging.

7.4.8 The training of the medical team

Because it is assumed that the properly trained will automatically behave appropriately, much emphasis is placed upon training as the major challenge of the future in family health. While this is to some extent true, the essential feature is that, without special and relevant training, most of the new challenges cannot be met. The Conference was concerned with three main aspects: training for redeployment, training for relevance to medical need and the problems of innovation and change in curricula.

7.4.8.1 Training for redeployment

It was clear that the traditional roles of the health care team had been decided upon at a time when the major threat to the family was from specific infectious diseases and that redeployment - a re-allocation of tasks and roles - was essential.

With changing needs, new task analyses could be elaborated and these were likely to alter both the role of the doctor and the nurse. Team work of of a multidisciplinary nature presents the greatest challenge to traditional status systems and considerable retraining was necessary if personnel were to be equipped to change with the times.

Particular attention should be given to the following aspects of training:

(1) the links between training in paediatrics and in obstetrics;

(2) the importance of providing better training on perinatal problems and those of adolescence;

(3) the importance of organizing the training of personnel in such a way as to give a much larger place to training in the field, outside the hospital.

7.4.8.2 Training for relevance

The objectives of education of the health care team have been the subject of much work by WHO. The Conference agreed that considerable revision of objectives, course content and method would be necessary if the type of care of the family which had been discussed was to be achieved. In particular common training objectives (for part of their courses), common studies for doctors, nurses and other health professionals (for part of their courses) and the early team work necessary for later multidisciplined care were immediate objectives.

The course content in most schools was felt to be archaic and the Conference followed WHO in hoping that the inclusion of community medicine, biostatistics and the behavioural sciences would produce some of the changes required.

The content should include the social aspects of paediatrics and obstetrics. Finally, it had to be remembered that university and post-university training was never sufficient and that it was essential to organize various types of continuing training and in-service training.

7.4.8.3 Innovation and change in curricula

The Conference agreed that within the educational systems the problems of change were the most difficult. It is altogether too easy to blandly

advocate a constant review of the relevance of the curricula to contemporary need. The challenge is in how to bring this about.

8. CONCLUSIONS AND RECOMMENDATIONS

Severe shortcomings in almost all parts of the Region have been revealed by a survey of MCH services in Europe and most of them were confirmed and amplified by the discussions in the Conference. Though they are, of course, of a different nature they apply to developed and developing parts of the Region. To a large extent they must be seen as the result of incongruence between the new knowledge which is bringing new dimensions to family health and the traditional views on services. This criticism was made with considerable force.

The health of mother and child is affected by all the human environmental conditions - the ecosystem - in which the family exists. MCH services must therefore be centred not so much on separate individual health problems but rather on the care of the whole family as a unit.

For much the same reasons the delivery of health care for the family cannot be regarded as a specific task of any medical discipline but rather a concerted activity of all members of the health professions. Effective co-operation in this field still shows gaps in most countries.

The psycho-social factors influencing health, particularly in industrialized countries, are an emerging problem of considerable importance in Europe. Disadvantaged groups of society in terms of economics, education and housing conditions show poorer health and physique, including a higher incidence of borderline subnormality. Observations on migration and recent urbanization confirm the common association of social risks with health risks.

The long-term effects of physical and mental disturbances in infancy and childhood (and even of pre-natal conditions) on the health of adults make continuity of care and data linkage issues of high priority.

Family planning can significantly improve the state of family health, bring down maternal, perinatal and infantile mortality rates and allow a better physical and mental development for wanted children in a more favourable environment. Counselling on family planning, to be effective, must always be an individual matter and be adjusted to the social, cultural and educational background of each family.

More of an epidemiological approach to family health could provide health authorities with a better assessment of the needs and demands of the

population. This approach will have to take into account the recent changes in society affecting family health as well as the changing disease patterns and our changing ability to intervene in disease.

Health information systems in use at present, though largely limited to such traditional parameters as mortality and morbidity, could be improved by record linkage of different parts of the services and different stages of life. Positive health criteria are needed and will be more useful but must be developed further.

The application of recently developed and promising techniques in monitoring the health of mother and child will improve the outcome of MCH services. In particular this applies to the high-risk groups of mothers and foetuses during all stages of pregnancy. Screening procedures in childhood also show promise. Expensive and highly sophisticated techniques will, however, have to be limited to high-risk groups and proved to be worthwhile.

Maternity and paternity benefits and leave, maternal allowances, day-care facilities for infants and pre-school children and many other supporting services are probably the best way to stimulate the use of services and so to prevent perinatal problems. However, they will not necessarily promote active consumer participation.

While information on disease will always find a great deal of public interest, relatively little interest or attention is given to prevention. Health education is largely unsuccessful in this field. To have a reasonable hope of success the education of the public in family health must therefore be a continuing process involving school, home and community. The mass media could do much to increase public awareness.

The training of medical and health personnel in most parts of the European Region is still traditional in outlook and as a result the health professionals are often very traditional in their professional activities. Training objectives and curricula are therefore in urgent need of revision.

From most of the above conclusions, recommendations may readily be inferred. The Conference was aware of the fact that in order to overcome the very large gaps revealed by the WHO survey (as outlined under Part 3.) contributions by all governments, national and international bodies and professionals responsible for the field of health are required. The main recommendation of the Conference is therefore that urgent steps be taken to fill the gaps in services which were discussed.

8.1 The role of WHO

The meeting recommended strongly that WHO should continue in its role of co-ordinator of national efforts, and stimulator of further exchanges of information, particularly at the technical level, about the advances which are being made into the problems outlined during the discussions (Part 4.). Of particular importance in this exchange of information were research

findings relevant to family health, internationally comparable statistics and the definition of risk categories, their weighting and examples of strategies which have proved successful.

8.2 Readjustment of services

The needs and demands of the family should be reconsidered carefully in the light of new knowledge and recent changes in society. This exercise is likely to involve more of an epidemiological approach than formerly and more elaborate health information systems. The effectiveness and cost efficiency of services in meeting these needs and demands must be measured. The implementation of elementary research findings relevant to family health is essential and long overdue. The integration of fertility regulation and genetic counselling should be given high priority.

8.3 Training

The basic education of health personnel in all aspects of family life should be reviewed and perhaps improved by more adequate and early contact with families and the community. Training objectives and curricula should be revised and should take into account the changing responsibilities of the professions as well as today's wider concept of health. Strategies to encourage consumers' participation should be seen as a relevant issue.

The common bases of tasks and skills should be emphasized by discussions between trainees in the various types of health professions.

8.4 Research

The Conference could only stress those areas where gaps were felt most and the following subjects were particularly recommended for further research:

(a) adolescent medicine,

(b) the control of human reproduction, including side effects of contraceptives,

(c) the development of better measures for intellectual and emotional development,

(d) work on new "positive" health indices which could be used by all countries in the Region,

(e) definition of criteria and weighting for risk groups among mothers and children, and

(f) longitudinal studies on the influence of environment, nutrition, etc., in early childhood on the health of the adult.

ANNEX I

EXAMPLES OF THE PROBLEMS DISCUSSED IN PART 4

The examples given below are taken from experience in the Region and were thought by the participants to be important. It is by no means an exhaustive list.

1. Improving the quality of child and family life - how far is this a health problem? How is it studied? How can services assist? What are the "psycho-social" needs of the family?

2. The reluctance of those most in need to avail themselves of services, particularly family planning. How can this aspect of health behaviour be changed?

3. The survival of the handicapped. What are the costs, and how can services be improved?

4. Communications between the health care team and the patient. How can these be improved?

5. The application of medical knowledge in prevention. Many known and tried preventive measures are still not used. How can interest in prevention be stimulated?

6. The measurement of risk and the use of information. How can we improve our medical information systems and use them in intervention?

7. The relevance of the education of health professionals to contemporary need. How can we ensure revision and updating of our training programmes?

8. The integration of services and disciplines. How can we ensure that administrative structures serve rather than fragment medical care?

9. The formulation of research goals and research design. How can we introduce rational research policies which respect local priorities and needs?

10. Evaluation of orthodox care. How can we overcome resistance to studies of the effectiveness and cost-efficiency of our services?

ANNEX II

AGENDA

Monday, 11 November 1974	Visits to institutions concerned with maternal and child health
Tuesday, 12 November	Opening session
	Election of officers
	Adoption of provisional agenda
	A. Review of maternal and child health programmes in the European Region
Wednesday, 13 November	B. Outstanding problems and promising approaches in maternal and child health
Thursday, 14 November	C. Strategies in the delivery of maternal and child care
Friday, 15 November	D. Emerging challenges and future outlook
	Conclusions and recommendations
	Closing session

ANNEX III

LIST OF BACKGROUND DOCUMENTS PREPARED BY THE TEMPORARY ADVISERS AND CONSULTANTS[1]

A. Review of maternal and child health programmes in the European Region	
WHO's recent activities	Professor P.O. Petersson
B. Outstanding problems and promising approaches in maternal and child health	
(a) Psycho-social approach	Dr B. Thompson
(b) Implications of fertility regulation	Professor L. Andolžek
Implications of fertility regulation	Professor V.I. Bodjažina
(c) Epidemiological approach	Professor M. Backett
(d) Information systems and record linkage	Dr J.-C. Vuille
C. Strategies in the delivery of maternal and child care	
(a) Planning, organization, management and evaluation	Dr A. Belhaj
(b) Strategies for high-risk groups - family, mother, child (including screening procedures)	Dr C.F. Ruoss Professor O.B. Wasz-Höckert
(c) Social services for mothers and children (day-care, legislative aspects, etc.)	Miss M. Mikkola
(d) Consumer's participation and self help	Dr B. Thompson
D. Emergency challenges	
(a) The quality of life - early childhood, adolescence, adulthood, the handicapped	Professor K. Bozkowa Dr V. Tatočenko

[1] These documents were distributed to the consultants and temporary advisers only.

(b) Childhood as a basis for long-term health — Professor I. Doğramaci

(c) Challenges in the field of education — Dr Nathalie P. Masse

Additional documents were also received from participants of the USSR as follows:

New Trends in Maternal and Child Health in the USSR — Professor Elena C. Novikova

Principles for the Prevention of Perinatal Pathology — Professor L.S. Persianinov

ANNEX IV

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[1] Participation expenses not paid by WHO

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[1] Participation expenses not paid by WHO

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