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HEALTH ASPECTS OF FAMILY PLANNING

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HEALTH ASPECTS OF FAMILY PLANNING

General Background

"Disease" and "health" are words frequently used in private conversations, in national and international political speeches, in sociological, anthropological and demographical meetings, where health themes are discussed. All the people who use the terms "disease" and "health" take as a starting point the idea that their definitions, if such definitions exist or have any meaning at all, are the same for the listener as for the speaker.1/ This is particularly so in the case of Africa, which is often regarded and discussed as though it were a homogeneous whole, whereas the continent is, in fact, diversified by linguistic and cultural differences. In differing areas different diseases dominate the scene and attitudes to these diseases themselves vary.

2. It is not by accident that the less developed parts of Africa are those in which the health problems are the greatest, and particularly those in which the transmission of malaria is most intense. Health development requires a background of education and administrative structure, as it does in itself produce strains and stresses in the economic and social pattern of a country which can only be taken up if the country has a reasonable and stable economic, cultural and industrial background.2/

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1/ Ordone -Plaja, A. (1971) In: Teamwork for World Health, CIBA Foundation Symposium in honour of Professor S. Artunkal, p.167. London: J. & A., Churchill.

2/ Macdonald, G. (1963) Acta tropica, 20, 3, 269-278.

3. In any country, or even locality, there is commonly one disease which is of more than usual importance, and which perhaps dominates the health characteristics of the area, for example, onchocerciasis causing blindness in a large proportion of the sufferers,[1] or trypanosomiasis which has dominated large areas of Western and Central Africa,[2] filariasis with its crippling and humiliating effects, dracontiasis, yaws, leprosy and other major disease syndromes. Apart from these dominating and often dramatic conditions, the foundations of ill health in Africa are much the same as elsewhere and include nutritional deficiencies, ignorance of the methods of care for the infant, the growing child and the handicapped, infections, and the hazards of child-bearing. A programme of health development which dealt only with the exotic diseases could not be successful unless it also took full account of these conditions, which affect the people of every country and constitute a major source of mortality and morbidity.

4. In Africa, as elsewhere, there are two sections of the community to be considered in the planning of family health services, the urban and the rural. For those who remain in the rural areas the problems are those of ignorance, low economic subsistence, over-sized families, a scarcity of health personnel and facilities and lack of communication facilities that make the delivery of health care difficult.

5. The mass migration of rural populations to the cities has produced many new problems, not the least of which are concerned with health. They have exchanged the old cultural patterns for a cash economy, overcrowding in slums and poor sanitary conditions. The delivery of adequate good quality health care then becomes a real challenge for the population of many such urban areas, which is increasing at a very high rate indeed.

Health and Fertility

6. Data from many countries in the world show a strong correlation between *per capita* income *per se* and decreased mortality. Infant mortality rates, more than any other, have an impact on family health in that fertility and infant mortality have always been correlated. This is well demonstrated in the African scene, where the infant and child mortality rates are high, and where in many rural areas a newborn child

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1/ Hunter, J.M. (1966) Geog. Rev., 56, 398.

2/ Mulligan, H.W.(1970) Ed. with Potts, W.H., The African Trypanosomiases. London: Allen & Unwin.

may have slightly more than one chance out of two of attaining the age of five years.1/ Together with these high mortality rates, the birth rate may be as high as 49 per thousand, and the average total fertility around 6.5 per woman, higher than in any other region in the world. High mortality is certainly an important factor, if not the main reason, behind the high fertility orientation. There is increasing evidence that a lowered infant mortality must antedate lowered fertility. Mortality trends may influence fertility trends by way of two mechanisms: (i) with reductions in mortality, compensatory reductions in fertility are required if the desired family size is to be achieved, (ii) when there is less uncertainty about survival, the desired family size may be reduced.2/

7. Health measures including family planning, by their effects on morbidity, mortality and fertility, can accelerate the economic transition from low to high levels of production and consumption. In such situations, low death rates tend to be matched by low birth rates. These patterns provide the maximum returns from investment in human resources and keep to a minimum the burden of child dependency. Needs and resources for health and family planning programmes evolve in the context of general improvements in the standards of living, resulting in desired changes in mortality and fertility rates, and in concomitant health, demographic and economic transitions.2/

Health problems of mothers and children

8. It should be borne in mind that such health problems as confront the African region are determined as much by economic as geographical factors. The comparison between the developed and the developing countries shows marked differences in disease patterns, more manifest in paediatrics and obstetrics than in the other clinical disciplines. Mothers and children represent between 60 and 75 per cent of the populations of African communities. The vulnerability of this group arises from the specific problems connected with reproduction and growth. Maternal mortality is high and morbidity is common.

9. The 10 main groups of disease in children in rural Africa include acute respiratory infections, gastro-intestinal disorders with dehydration, protein calorie malnutrition,

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1/ Pradervand, P. (1970) Family Planning Programmes in Africa. Paris: Development Centre of the Organisation for Economic Co-operation and Development.

2/ Frederiksen, H. (1969) Science, 166, 837.

complications of measles, malaria, tetanus, anaemia, tuberculosis, pyogenic meningitis and the "iatrogenic" group of disorders. In addition to these, infestation with intestinal parasites constitutes an important additional burden in the majority of countries. The greatest toll of deaths is due to the universal diseases, these being more prevalent and more lethal because they occur, as a rule, against the background of protein calorie malnutrition.

10. For the mother the health hazards of pregnancy, delivery and the peurperium differ in some of the countries of the African region. However, for all, poor nutritional status, anaemia and multiparity constitute major hazards in pregnancy. In delivery, obstructed labour, haemorrhage and sepsis are the most commonly encountered fatal risks.1/

Health and Family Planning

11. From the medical standpoint, family planning should be viewed as a matter involving the family as a whole, and particularly the health and well-being of mothers and children. It covers a wide variety of topics, therefore, in different areas, ranging from some countries where fertility is relatively low and larger family size is considered to be desirable, to other countries where large family size and rapid population growth rates are the principal problems.

12. The health justification for family planning as a factor in the reduction of maternal and child morbidity and mortality can be considered under the headings of (a) maternal age, (b) birth order and (c) other factors increasing reproductive risks.

(a) Maternal age:

In general the risks of child-bearing becomes greater as maternal age decreases below 20 years and, on the other hand, as maternal age extends into the later years of reproductive life.2/

(b) Birth order:

Maternal mortality rises with each pregnancy over three and is significantly greater with each pregnancy beyond five. Advanced age and advanced parity may occasionally

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1/ WHO (1969) Organisation and Administration of Maternal and Child Health Services. AFR/MCH/49. Brazzaville: WHO Regional Office for Africa.

2/ Perkin, G.W. (1969) In: Family Planning and National Development, pp. 59-67. London: International Planned Parenthood Federation.

act independently to increase maternal risks, but usually their effects are additive.

The frequency of still-births also increases with these two factors.1/

13. Family Planning programmes that direct special attention to high-risk mothers are therefore likely to have a significant impact, not only on infant and maternal mortality, but also on unwanted or excess fertility.

(c) Other factors increasing reproductive risks: Closely spaced pregnancies contribute to the anaemia so widespread in women in Asia and Africa. Yerushalmy2/ et al. have shown that three or more years between pregnancies is best for survival of an infant through childhood, and progressively greater infant mortality follows as birth intervals decrease. Infant mortality is significantly greater in rural than in urban areas. In those areas most mothers continue to deliver their babies at home with little or no professional assistance. Generally speaking, the poorly educated rural mother faces significantly greater risks in childbearing than her better educated urban sister.

14. One of the most persuasive arguments in favour of spacing of births is the effect of too close a pregnancy interval on the youngest child. If breast-feeding is suddenly curtailed by the mother's subsequent pregnancy, the infant may suffer a marked protein deficiency, since he may be unable to assimilate the less digestible and reduced amount of protein in his share of the family diet. The highest mortality among African infants, other than the neo-natal period, occurs around the time of weaning. The danger increases if the weaning is early, because the child's resistance to infection is lowered just at the time when his maternally acquired immunity to the childhood diseases is wearing off.

15. A comprehensive review of the health aspects of family planning was made by a scientific group in 1970.3/ Apart from the specific health aspects mentioned, other health and social considerations in support of family planning include (i) better child care and nutrition, (ii) improving maternal nutrition and well-being, (iii) avoiding hazardous

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1/ Eastmen, J.J. & Hellman, L.M. (1961) William's Obstetrics, 12th ed. New York: Appleton-Century-Crofts.

2/ Yerushalmy, J. et al. (1956) Amer. J. Obstet. Gyn., 71, 80.

3/ WHO (1970) Technical Report Series No. 442.

induced abortions.

16. The prevention of pregnancies in high-risk women is likely to be the most effective health intervention directly influencing both numbers of deaths and numbers of births.

17. The under-mentioned categories can be classified as high-risk groups:

(i) mothers suffering from specific and chronic disease which threatens life in case of pregnancy and childbirth; mothers with diseases such as cardiovascular diseases, severe anaemia, toxaemia early in pregnancy, diabetes, tuberculosis, kidney disorders and cancer.

(ii) mothers with short intervals between pregnancies.

(iii) multiparity greater than three.

(iv) maternal age less than 20 or greater than 35.

(v) histories of abnormal previous pregnancies.

(vi) low economic status, usually associated with one or more of the above.

Family Health Services

18. The special problems of rural Africa, and the tropics generally, are associated with the fact that there is a delicate relationship between the physical factors of climate, soil and the natural biological community that has become established. This balance is easily upset, and any major disturbance is likely to be disastrous.1/ However, as has been noted, socio-economic factors also have a major influence on the general levels of health, not least of these being that the health services available to a community are so directly affected by economic constraints.2/

19. The provision of medical care to the family, therefore, is affected by many other determinants apart from epidemiological needs.

1/ Adu, A.L. (1964) Int. Union Conserv. Nature. I.U.C.N. Publications N.S. 4, Morges, Switzerland.

2/ Abel Smith, B. (1963) Paying for Health Services, Public Health Papers No. 17, WHO, Geneva.

20. Medical care has been defined broadly as encompassing the complete range of personal health services - the promotion of health; the prevention of disease; the early detection of disease; diagnosis and treatment, and rehabilitation of the patient. These personal health services are produced, financed and delivered through a variety of activities, both in the public and the private sectors. The term "medical care" must therefore be broadly conceived as embracing the entire complex of personal relationships, and organized arrangements through which health services are made available to the population.1/

Medical care complex

21. The three major components of the medical care complex consist of:

(1) The personal component, or the people needing health services. This relates to the individuals and families who at some time in their lives will need and use the services made available to them in the medical care complex;

(2) The professional component, or the people who provide the health services;

(3) The social component, represented by the public and private organizations in the community which perform various functions designed to make the health services available to the population.

22. The interrelationships and interactions among these components provide the structure for the medical care complex, giving it form and outlining its functions. The principal interaction is always between the people needing the health services and those who provide them, which may be an intimate and personal interaction, as in the relationship between patient and physician, or indirect and somewhat impersonal, as in a mass-immunization programme. Whether direct or indirect, however, the personal interaction involved in providing and receiving services forms the core of the medical care complex. People, as individuals, as families or as groups, need and use personal health services. Dispensaries, health centres, hospitals, etc. are the essential

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1/ Myers, B.A. (1969) A Guide to Medical Care Administration. New York: American Public Health Association.

institutions or units through which personnel may be organized to provide services, where teamwork may be encouraged, and where many patients with a variety of conditions may be cared for efficiently and effectively.

23. Individuals and families are the final consumers of personal medical care services and there will, of course, be considerable variation in the individual goals and expectations which they hold. In general, however, the principal reasons for an individual's participation in the medical care complex are the relief of pain and symptoms and the prevention of future pain or disability. For most individuals in Africa medical care is a service which they are most likely to seek when an undesirable and usually unexpected illness or injury interferes with their normal abilities and daily activities. For the majority, then, medical care becomes a necessity which the individual would rather avoid. The individual or the parent may be ignorant of the fact that medical care is needed, particularly for the child, and frequently, even if a need is recognized, the individual may not seek it, or he may not know of the existence of local units of medical care at which he could receive treatment.

24. Such considerations are vital to plans formulated for the introduction of family planning services through the medical care complex. Health services that are inadequate or ineffective in meeting the demands of the individual and community for the simple relief of signs, symptoms and disability from ill health will probably prove to be ineffective in providing family planning services. No mother is likely to accept the advice or services of family planning if in the event of her surviving child or children falling ill they are unable to receive adequate medical care.

Criteria of good medical care

25. The essential elements of good medical care are:

(i) accessibility
(ii) quality
(iii) continuity, and
(iv) efficiency.1/

1/ Myers, B.A. (1969) A Guide to Medical Care Administration. New York: American Public Health Association.

26. These elements become objectives in the provision of good medical care:

(i) **Accessibility:** Good medical care must be accessible to the individual at the time and place where he needs it, while the individual provider of the services should have access to a com rehensive range of services from other colleagues, as well as to the facilities, equipment, and drugs necessary for his patient's needs.

(ii) Quality: Medical care of high quality is that which provides modern scientific knowledge and technique which, at the same time, should be acceptable to the individual.

(iii) Continuity: From the patient's standpoint the medical care process must treat him as a whole person, and not just his disease. Thus continuity for the individual involves concern for him as a human being in the context of his family and community, and an orientation towards promoting and maintaining his total health. It therefore implies the integration of preventive and curative services. For example, a mother who takes her child to a clinic where she witnesses the sympathetic and efficient attention her child receives may be susceptible to a suggestion that she should bring her other children to the clinic for preventive health examinations, or accept advice on family planning services to ensure the continued or improved health of her family.

(iv) Efficiency: The fourth essential element for good care is efficiency, which includes economy as an important constituent. Efficient administration of medical care programmes promotes the economical use of limited health resources and provides a means for achieving good medical care for the community.

Basic Health Services

27. Medical care for the family and the community is provided through a network of co-ordinated peripheral and intermediate units, with a central administration capable of performing effectively selected functions essential to the health of an area, and ensuring the availability of competent, professional and auxiliary personnel to perform these functions. This network constitutes a basic health service.1/

1/ WHO (1954) Technical Report Series No. 83.

28. The peripheral health unit should be a permanent establishment within easy reach of the population it serves and should be staffed by a team of professional and/or auxiliary health workers equipped to carry out its functions at the unit and at the homes of the people. Where the area to be covered is small because of high population density, the staff of the unit will normally be stationed at the main centre; in sparsely populated areas, or where communications make travel difficult, there will be a need for health posts or some centres staffed by resident workers.

29. The following are considered to be basic health services:

(1) Maternal and child health, including family planning.

(2) Communicable disease control.

(3) Environmental sanitation.

(4) Maintenance of records for statistical purposes.

(5) Health education of the public.

(6) Public health nursing.

(7) Medical care (to an extent varying with the needs of the area and the accessibility of large hospital centres).

30. In an attempt to provide good medical care and satisfy the criteria of accessibility, quality, continuity and efficiency, the objective for health administrations is to provide an integrated health service, which is the service necessary for the health protection of a given area and provided either under a single administration or under several agencies with proper provision for the co-ordination of their services.1/

Family Planning in Health Services

31. The advantages of channelling family planning through the system of health care are multiple. Health workers have many opportunities to introduce the subject in the context of post-partum and post-abortal care, infant and child care and immunization, family counselling on nutrition needs, and management of special disease problems such as tuberculosis. Basic health workers not only have

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1/ WHO (1954) Technical Report Series No. 83.

access to people at such critical periods, but also have the ability to establish the intimate rapport with individuals which is so important in dealing with problems related to reproduction. Furthermore, many types of health workers are now being trained and given ex experience in the personal and group education approaches which are so essential for family planning efforts.

32. The whole range of problems associated with reproduction, problems of sterility, pregnancy, prevention of abortion, sex education, etc., require the skills and techniques of general health services. Family planning services thus integrated with general health services can focus on all interrelated factors and can better determine the priorities and resources required in particular communities.

33. Many fertility regulating methods now in hand or potentially available require health personnel with appropriate training to provide the techniques and supervise follow-up, and to study and manage side-effects. The usefulness of different methods rests upon a number of factors: their effectiveness in preventing pregnancy, risks to health entailed in their use, their cost and simplicity of use, and other factors which influence their acceptability. These factors interact and play a role in influencing both the selection by administrators of specific methods for programmes and the choice and continued use of methods by individuals or couples.

34. Many methods which are used successfully by highly motivated individuals, are too difficult or unpleasant for regular use by those less motivated. Some easily used methods are too ineffective in preventing unwanted pregnancy. The major, and more frequently the minor, side-effects of many methods interfere with continued practice.

35. Basically, the risks associated with any method must be compared with the risks of using other methods or of not using any method at all. Thus the risks to health, or life, from unwanted pregnancy in a given setting may be much higher than the risks of side-effects from specific contraceptives. The conditions of morbidity and mortality prevailing in a country or community, and the availability of health care that may be required in relation to certain methods will need to be considered in assessing comparative risks of avoiding unwanted pregnancies and the major and minor side effects of different methods.

36. Great advances have been made in the development and improvement of methods of fertility regulation in recent years, but judged by any criteria, present day technology

is far from satisfactory, and there is an unquestioned need for the health sector to broaded and intensify fundamental and applied research for the development of new and better methods.

37. The effectiveness of family planning in the health context is further strengthened by other considerations. The administrative structure established by health programmes to collect information on births, deaths, disease, the performance of the health personnel, and facilities available, serves as a ready channel for evaluation of the family planning components of health services. There are also logistical reasons for integrating activities dealing with family planning with those concerned with other health needs of communities. Funding can be pooled, a stronger infrastructure developed, supervision strengthened, and duplication of facilities avoided.1/

38. As the implementation of family planning activities involves individuals or groups of individuals, any concept of devising a health service system or structure for integrating family planning activities must relate to the individual and the family. It is appreciated that as resources and other factors vary, so does the extent of the health service; with the result that health activities and tasks are performed by different categories of personnel in different situations. The common factors are the actual tasks which have to be performed or undertaken in providing a service or satisfying a demand. Such tasks are universally recognized, if not uniformly performed. There is little variation in the task, but variation can enter with regard to the category of staff available to perform it.

39. The operational units of health services vary according to the system of delivering medical care. The use of such service units for family planning will depend on existing commitments, in terms of work-load and unit-time factors, of the staff and the contact that is possible with the particular groups involved with programme objectives. Rather than consider the units of delivery as such, it may therefore be more profitable to review the activities performed through the basic health services as outlined above and to assess their possible roles in the delivery of family planning activities. They can be summarized as follows:

(1) Maternal and child health services:

40. Health problems of mothers and children are numerous and complex, with important interrelationships to each other. The factors that contribute to ill health are largely known

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1/ WHO (1969) Technical Report Series No. 428.

and they have to be kept constantly in mind if an attempt is to be made to define the objectives of maternal and child health programmes in Africa. The ultimate objective should be to reach the maximum number of the population with at least the minimum of services which can be considered as basic.

41. The range of care and supervision included in these services covers parental and post-natal supervision, delivery, infant and child health clinics, as well as special screening surveys. Family planning programmes can be implemented in all activities of MCH clinics, for they provide an opportunity for motivation in family planning by the nurse-midwife in antenatal and post-natal home visitation, and servicing of family planning methods. With good organization, family planning and general MCH care will be mutually reinforcing and will encourage the concept of continuity of care for the family. The potential demand on such services can be readily calculated and the objective in quantitative terms is to provide health protection for all mothers and children. The effectiveness of such services can therefore be readily assessed by consideration of the utilization of them.

42. In Africa maternal and child health activities are, at the periphery, performed principally by auxiliaries who cannot function successfully in isolation. The effectiveness of auxiliaries is therefore in direct proportion to the amount of in-service training and guidance given by professional supervisors and to the interest shown in their work. The untrained village midwife also has an important role to play in rural communities in family planning activities, within the field of operation of MCH.

43. It is essential for maternal and child health services to have defined and feasible objectives, in their geographical setting, and within the constraints of total resources, and for evaluation of the achievement of these objectives to have been made before deciding on the place of family planning activities within this setting.

(2) Communicable disease control:

44. Special programmes for the control, for example, of malaria and tuberculosis, leprosy and venereal diseases, take staff into the homes of the community. Geographical reconnaissance with household registers are usually developed, which are the basis for later vital statistics registration. The use of such staff for identifying vulnerable groups and for simple educational measures are thus relevant.

(3) Environmental sanitation:

45. An important objective for the health sector programme in most national plans is community participation and co-operation, particularly with regard to programmes related to improvement of the environment. Such a concept is indeed included in the definition of public health.1/ Participation of the community should preferably be associated with adult education in all fields of community health, and particularly family planning.

(4) The collection of data and maintenance of records:

46. The level of registration of births and deaths varies throughout Africa. In some areas a cadre of "village agents" has been developed in association with special programmes for the control or eradication of communicable diseases. In most situations such a staff is recognized as part of the health team in the community, with special tasks related to the surveillance of disease and maintenance of records. The vital statistics recorded by such agents can help to identify vulnerable areas, families and individuals, and assist later in the evaluation of family planning programmes.

(5) Health education services:

47. Bearing in mind that many of the basic elements of ill health in a community, such as nutritional disorder, ignorance about infant and child care, poor environmental and personal hygiene, the unchecked spread of infections, and the many accidents of all kinds, can only be remedied by personal or community action taken in association with or on the advice of the health services, it will be appreciated that health education must be an integral part of the basic health services and must go together with all the health services that are provided. Such factors as population density and the consequent effect on environmental resources including water, housing space etc., and the personal hazards of too frequent and too many pregnancies, must be taken into account when family health is being considered. Education about family spacing should thus be an integral part of family and community health education.

(6) Public health nursing:

48. Such services as home visiting, disease contact tracing, post-natal care, child health care, with general health education on personal hygiene and nutrition provide the staff with an opportunity to assist in the different phases of family planning activities.

1/ WHO (1952) Technical Report Series No. 55

(7) Medical care:

49. Apart from the general treatment of common illness and injury at out-patient clinics, there exist many specialized clinics for medical care therapy. Wherever a health service system operates such clinics for malnutrition, tuberculosis, leprosy, or other conditions in which pregnancy could constitute a medical hazard and should therefore be deferred, then family planning information and counselling and care could and indeed, should be available. The delivery of medical care through in-patient services in hospitals provides many opportunities for the development of family planning activities. Contact at the time of delivery, "the post-partum approach", provides the indication that the patient belongs to the fertile target population, and a similar opportunity arises after an abortion has been identified. Gynaecological investigations and treatment similarly identify those requiring family planning counselling and care.

50. It is through these different settings in the basic health services that the introduction of family planning may be developed. Before the final choices are made a forecast is necessary of the likely acceleration in demand for the services, once introduced, for like every other aspect of basic health services they must satisfy the criteria of accessibility, quality, continuity and efficiency.

Conclusion

51. It will readily be appreciated that in considering the use of the existing health facilities for the delivery of family planning care, services that are ineffective in improving patterns of health and providing for the family will probably also be ineffective in the regulation of reproduction.1/

52. The task of the health administrator is to provide a system which will ensure an integrated preventive and curative medical service, supported by an efficient administration. There is need for a constant search for a balance between effectiveness and economy, between national and local services, between mobile and static services, between the day-to-day care of populations and the need to develop scientific research to benefit the community.2/

1/ Bryant, J. (1969) Health and the Developing World. Ithaca and London: Cornell University Press.

2/ WHO (1967) Technical Report Series No. 350.

53. Family health services must therefore aim to provide for the prevention, control, and in time elimination, of the major disease problems, for the care of the infant and growing child, and for the prevention and treatment of the common illnesses and accidents of life. These conclusions call for continued efforts towards the building up of an infrastructure of health services aimed at all health needs, including family planning. With such an infrastructure both the general health and interrelated family planning objectives can be achieved and will be mutually supportive.

54. Careful health planning is required for the most judicious distribution and utilization of limited resources.1/ Current estimates of the costs of a world-wide build-up of basic health services indicate that these are well within the limits of available economic resources.2/ Technically, public health administrators have developed the knowledge required for the organization of decentralized essential basic health services. From the political and humanitarian viewpoint such an approach is acceptable everywhere.

55. What is now called for is, in a sense, a "mass campaign" for basic health services which will most successfully bring the benefits of general health services, including family planning, to the largest possible number of people.3/

1/ WHO (1967) Technical Report Series No. 350.

2/ Taylor & Berelson (1968).

3/ Kessler, Drs A. & S. (1970) Health Aspects of Family Planning, WHO Study Group on Health Education in Health Aspects of Family Planning.