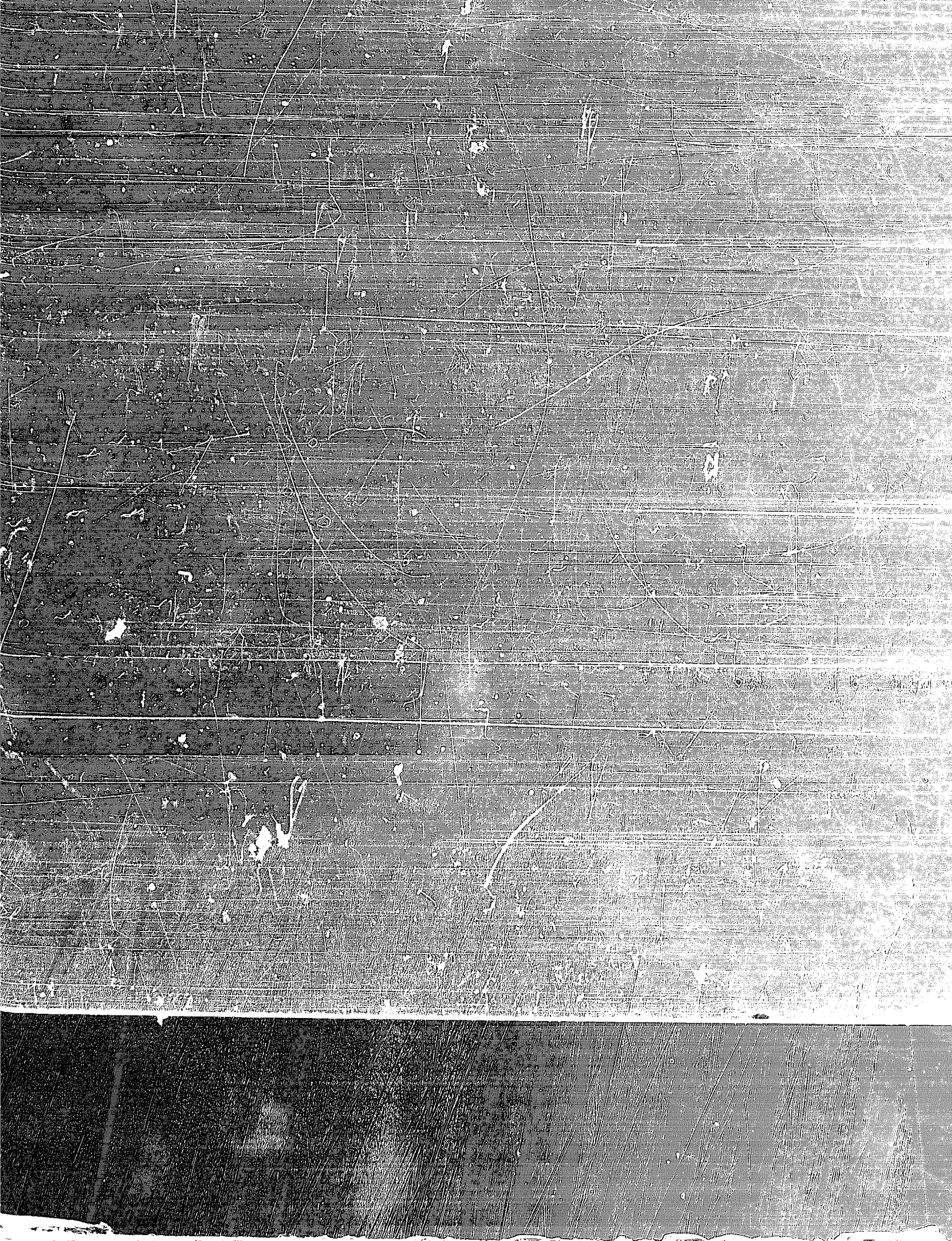


The Principles and Practice of Primary Health Care
Contact Special Series No. 1

Published by:
Christian Medical Commission
World Council of Churches
150 route de Ferney
CH-1211 Geneva 20
Switzerland

Paper copies are $ 2.00.

Available from:
Christian Medical Commission
World Council of Churches
150 route de Ferney
CH-1211 Geneva 20
Switzerland

contact

SPECIAL SERIES NUMBER 1
APRIL 1979

STUART J. KINGMA

THE PRINCIPLES AND PRACTICE OF PRIMARY HEALTH CARE

CONTACT "Special Series" is a publication of the Christian Medical Commission. Individual issues are designed to gather under one cover a collection of previous CONTACT issues and related articles dealing with a single theme. This first issue focuses on the Principles and Practice of Primary Health Care, while the second and third issues will be devoted to the study programme of the CMC and the theme, "Health : The Human Factor", respectively.

The price for each number of the "Special Series" includes postage:

Sfr. 3.50 US$ 2.00 DM 3.50 £ 1.00

Note: Readers in developing countries for whom the purchase of one or several copies of this CONTACT Special Series may be onerous (or who experience difficulties in obtaining foreign exchange) are invited to address their requests to the Christian Medical Commission (at the address given on the cover of this issue) so that the cost involved may be obtained from other sources.

Cover illustration : Stuart J. Kingma, CMC, Geneva

CONTACT is the periodical bulletin of the Christian Medical Commission, a sub-unit of the World Council of Churches. It is published six times a year and appears in four language versions: English, French, Spanish and Portuguese. Present circulation is in excess of 15,000. The papers presented in CONTACT deal with varied aspects of the Christian communities' involvement in health, and seek to report topical, innovative and courageous approaches to the promotion of health and integrated development.

The editorial committee for CONTACT consists of: Stuart Kingma, Associate Director and Editor, Miriam Reidy, Editorial Assistant and Heidi Schweizer, Administrative Assistant. The rest of CMC staff also participate actively in choosing topics for emphasis and the development of materials: Nita Barrow, Director, Eric Ram, Associate Director (special portofolio: Family Health), Jeanne Nemec, Secretary for Studies, Trudy Schaefer, Secretary for Documentation and Victor Vaca, Consultant. Rosa Demaurex, Secretary, is responsible for the CONTACT mailing list. CONTACT is printed by Imprimerie Arduino, 1224 Chêne-Bougeries/Geneva, Switzerland.

CONTACT is available free of any subscription payment, which is made possible by the contributions of interested donors. In addition, regular readers who are able to make a small donation in support of printing and mailing costs are encouraged to do so.

Certain back issues are available on requests. A complete liste of these is published regularly and appears in the first issue of each year in each language version.

CONTACT SPECIAL SERIES

NUMBER 1

THE PRINCIPLES AND PRACTICE OF PRIMARY HEALTH CARE

April 1979

CONTACT Special Series is a publication of

The Christian Medical Commission
World Council of Churches
Geneva, Switzerland

Printed by Imprimerie Arduino, Geneva

ABOUT THE AUTHORS

ELLIOTT, Charles — A distinguished economist, Dr Elliott was a member of CMC for some years. Currently Director, Centre for Development Studies, University College Swansea, and previously Senior Research Associate, School of Development Studies, University of East Anglia, Dr Elliott is an ordained Priest of the Church of England.

ELLIOTT, Katherine — Dr Elliott is the Assistant Director, Ciba Foundation; chairs the Rural Health Panel of the Intermediate Technology Development Group (which researches and helps develop self-help technologies for rural/village life); and is Honorary Director of the Appropriate Health Resources & Technologies Action Group (a WHO collaborating centre).

FOEGE, William H. — Director of the Center for Disease Control, Atlanta, of the US Public Health Services, Dr Foege was formerly Lutheran Church-Missouri Synod medical missionary in Nigeria, and subsequently, Director of the Smallpox Eradication Programme in 20 West African countries.

GIDEON, Helen — Before serving as CMC Consultant for Family Planning & Population Studies in Geneva from 1972-74, Dr Gideon's work was devoted for many years to assisting in the planning of countless community health projects, primarily on the Indian subcontinent. In 1975, she returned to "the field" to serve as Community Health Consultant to the Voluntary Health Association of India, and is now in active retirement.

GISH, Oscar — With a background in history, social sciences and economics, Mr Gish has been involved in national health planning with a number of governments and international organizations. He is presently teaching International Health at the School of Public Health, Michigan University.

HELLER, Thomas — Presently engaged in developing a system of urban-community-based health care in Sheffield, Dr Heller's previous posts include serving as Senior Research Associate, School of Development Studies, University of East Anglia; as Research Fellow, William Temple Foundation; and involvement in rural health care/development projects in several developing countries. Dr Heller has also completed a study of the British National Health Service.

HILL, Kenneth R. — Dr Hill is currently Professor of Pathology at the Royal Free Hospital Medical School, University of London. In addition to a number of permanent and visiting academic posts held over the years in many parts of the world, Professor Hill has served WHO in a number of consultancy capacities related to tropical diseases eradication programmes and medical education.

JOHNSTON, Mary — Social worker Mary Johnston's unique insight into people's participation in community health programmes was gained from her 10 years' experience (in roles varying from planning, administration, community conscientization and motivation) in the "Dana Senat" community development programme in Central Java, Indonesia – a programme built upon a health insurance scheme.

MORLEY, David — Currently Professor at the Tropical Child Health Unit (which he established) at the Institute of Child Health, University of London, Dr Morley is best known for his efforts to provide low-cost, comprehensive health care for underprivileged children through "Under-Fives' Clinics"; for his measles research; for the development and distribution (through TALC) of low-cost health care teaching visual aids; and for the "Child-to-child Programme" recently launched by the Institute.

PARMAR, Samuel L. — Reader in International Economics, Allahabad University and Principal, William Holland University College, Allahabad, India, Dr Parmar was previously on the WCC Ecumenical Institute faculty, serving first as Assistant and then Associate Director.

INDEX

PREFACE

Since the publication of its first issue in September of 1970, one of the principal orientations of CONTACT has been the advocacy of community-based health care programmes. This emphasis has been a central focus for the work of the Christian Medical Commission (CMC) from its beginning. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) declared their commitment to the same concepts in early 1975, in the name of Primary Health Care (PHC).

1978 was an important year in the growth and maturation of PHC policy and practice. The world-wide community of non-governmental organizations (NGOs) met in Halifax in May of that year to spend several days examining PHC programmes in many situations and to finalize a "position paper" on PHC. This paper, which set out the NGOs' current understanding of and commitment to PHC*, was presented at the WHO/UNICEF International Conference on Primary Health Care, held at Alma-Ata, USSR, in September of 1978. This truly bench-mark conference drew delegates from 134 governments and representatives of 67 United Nations' organizations, specialized agencies and NGOs. The Alma-Ata Conference, as it has become known, explored in great detail the full implications of PHC for national health planning, including the contributions of the private sector.

Community-based health care, or PHC, is a dynamic and evolving approach to promoting, maintaining and restoring health. This is true at the "micro" level – the mutual engagement of health and development structures with individual communities – and at the "macro" level – the global understanding of PHC as an approach to health care. Certain aspects of PHC are already more clearly defined and proven than others:

- It is, for example, well understood that PHC represents a serious attempt to rectify the injustices and maldistribution of health care services by a system *available and accessible to all.*
- It is increasingly recognized that improvement of the health status of a community cannot be achieved simply by changes in the "medical care delivery system", but requires a *comprehensive human development approach* which begins with a concern for safe and accessible water, better agriculture and nutrition, sanitation, education, employment, and goes on to more specific health interventions.
- The factor of *community participation* is recognized as crucial, but working out the means to facilitate this has been demonstrated mainly in selected, smaller projects and programmes. The implications of this for national health planning are more difficult to deal with since it involves a motivational process, a mobilization of community people and resources, a decisive involvement of the people at all stages, and a significant level of local responsibility and control.
- Somewhat less well appreciated is the need to *frame a PHC programme within the available resources,* to discover ways to make the whole approach to community development and health self-supporting and sustaining. This requires a greater understanding of the role to be played by financial and material resources from the local community, from the national government and, particularly, from outside sources.
- Some of the most difficult aspects of this initiative rest in the need to break out of existing patterns of training and the professionalization of care. If this PHC approach is to be honestly adopted, there are serious implications for *the approach to training all echelons of health workers,* for the expectations that health professionals and the health services may realistically have, and for public understanding of health and what health services can provide.

In order to assist in the continuing dialogue on PHC, in the search for locally and regionally relevant answers to some of the difficult questions posed above, the CMC has decided to publish this issue on PHC in the CONTACT Special Series. We have tried to collect in this volume a number of past CONTACT articles which illustrate the dynamic progression of thinking over the past nine years, and which touch on many of the points alluded to above.

We would like to invite your participation in this continuing dialogue and debate and would be pleased to hear your comments and views. Please write to us at the address on the front cover.

---

* The full text of the paper, "Non-governmental Organizations and Primary Health Care", is reproduced as Chapter XIV, Part 1, of this document.

CHAPTER I

COMMUNITY MEDICINE

by Dr William H. Foege

This paper was delivered by Dr Foege at the Conference of the Protestant Churches' Medical Association in Nairobi, Kenya, in February 1970, and was reproduced in CONTACT 2, March 1971.

Community medicine has different definitions. It is often referred to as public health, preventive medicine, or social medicine. Public health is a misleading term, however, since we are talking in community medicine about personal health multiplied many times. Likewise, preventive medicine does not capture the meaning since all of medicine is preventive, whether referring to the prevention of illness, prevention of disease, prevention of the progression or persistence of disability, or prevention of death. Social medicine has too many adverse connotations to be as useful a term as it might be.

What we are here talking about is *medicine of the human being in the aggregate.* It goes beyond the discussions of care of one person to care of total people. It does not separate medicine into curative and community or curative and preventive, but rather deals with medicine as a total approach. For all of our abilities to admire specialization, this is not a specialty. It is a philosophy. A philosophy which appreciates that total resources will never meet total needs and therefore asks, "How can we deliver the greatest amount of healing with our limited resources ?" It is a philosophy which appreciates that all of our medical efforts in Africa leave things undone and is willing to ask, "Are these things left undone actually higher priorities ?" It is a philosophy that recognizes the true tragedy of a child dying of measles a mile from a mission hospital : a preventable disease not prevented. The questions are directed to the health needs of groups, communities, areas, countries, and regions.

While working in the relief action in Nigeria, a woman gave a package to a relief team, said, "Thanks Red Cross," and left. It was the dead body of her starved child who, but for better perspective, would have lived. We live in medical missions with the burden of thousands of such packages, each bearing a note, "Thanks medical missions", who, but for our perspective, would be alive.

I will speak today of 3 things : (1) the practical dangers of our present approach; (2) examples of a community approach drawn from West Africa; (3) suggestions for community medicine in our present medical mission approach.

PRACTICAL DANGERS OF OUR PRESENT APPROACH

The heart of medical mission practice, as we have seen, has been curative medicine. Hospitals and clinics are the vehicle of delivery. One assembles the sick and the needy after they are sick and needy. Some of this is the result of a very limited look at health or blind activism, but much of it is the result of reasonable men reaching the conclusion that this is how the church should work. For instance, Dr Paul Brand has said, "Inoculations are something for which the people may feel no conscious need. Other public health measures, such as training in hygiene, may also fall into this category, but a missionary doctor treats actual needs in individuals."

Another missionary doctor, Dr Pfaltzgraf, has said, "If you are working on mosquitoes rather than treating the child with malaria, you have failed that mother and her dying child."

I have great respect for these men and quote them because I know they express the feelings of many of you. But perhaps we have been wrong. Dr Franklin Neva, Associate Professor of Tropical Public Health at Harvard, says, "What the developing tropical nations actually need is better nutrition, education, and preventive medicine : insect control, sanitation, inoculations. The lack of preventive medicine so far is a heritage from the curative-medicine-minded missionary doctors."

Perhaps the difficulty in comparing mosquito work to a child with malaria is that you can see the child and the mother's gratitude. You cannot see the 6 children who might have been spared malaria with

the same investment of time and talent in mosquito control. Yet you have failed those 6 to no less an extent.

I am impressed by the arguments made in the last few days that missions have inadequate money. I am not impressed, however, if you have money and staff to run a hospital but cannot get money and staff for community medicine, because it means the priorities are wrong. You are not seeing the full picture of what is happening in the villages. The question is not, "Can we afford to get into community medicine ? " but rather, "Can we afford to ignore it ? "

Ivan Illich, a Catholic priest from Latin America, has provided a thoughtful review entitled "The Need for Counterfoil Research". He says, "The ploughs of the rich can do as much harm as their swords." Perhaps it is appropriate to say surgery theatres can do more harm than bombs because it is easier to create mass demand for the former. The nice mission with a nice but inappropriate programme is not simply harmless. He goes on to say we are victims of our environment, of the institutions we build. Progress to us means proliferation or expansion of these institutions, and as we move to aid developing areas, we transplant our aspirations. This can lead to greater underdevelopment.

For example, a medical centre can become a mecca of quality medical care, but what is the price ? If $100 would save a life, we are easily content to say the cost of saving a life is $100. But if that $100 had been instead invested in providing safe water supplies or better nutrition and if it could have saved 10 lives instead of one, then the cost of saving one life is not simply $100 but is $100 plus 9 deaths. This is the production of underdevelopment. In addition, the centre now becomes a sponge absorbing surrounding medical talent, either pulling in those from other areas or preventing them from going to other areas. This produces medical underdevelopment at the periphery.

Third, it raises aspirations and fixes the demands of the majority of the population on unattainable goals. This is the production of underdevelopment as a state of mind.

"The fraud perpetuated by the salesmen of medicine is less obvious but more fundamental than that perpetuated by Coca Cola salesmen because it hooks people on a more demanding drug."

Another difficulty is the pressure of local need. It becomes difficult to resist the pressures of other missionaries who do not see beyond today and of the local people who may not understand what you are doing; and while these are difficult problems, they are solvable.

Perhaps the most difficult of the road blocks is our attitude and understanding of what healing is. As long as it is a mechanism to do a number of other things, then priorities must be determined by church and political considerations. Only when healing is seen as a responsibility of becoming a Christian, part of our redemptive function in the world which needs no other justification, do we possess the freedom to plan our medical work on the basis of the priorities of need rather than the priorities of a church board. When we as a church can see people who need food, be assured in advance that not one will be converted, and still feed them, we have understood our responsibility as a church.

EXAMPLES OF A COMMUNITY MEDICINE APPROACH IN WEST AFRICA

Although the following are descriptions of government programmes, it will require little imagination to transfer the philosophy to missions. The first example is a programme of smallpox eradication, begun in 1967 in 20 countries of West and Central Africa. We have had the technical knowledge to eliminate smallpox for 170 years, but only now are we doing it. Why ? Because we have had the ability but not the philosophy. Perspective has been lacking as we looked at individuals and not communities.

The area involved in the Smallpox Eradication Programme is larger than the continental United States, with 120 million residents. In 1967, the highest smallpox rates in the world were found in West Africa. We began mass vaccination programmes in West and Central Africa based on country vaccination teams. The majority of the people used were non-medical people who were instructed in their particular job — be it health education and advance publicity, surveillance, vaccinating, or assessing — and were educated as to how this would fit into a larger plan. In addition, teams were trained to detect, investigate, and control outbreaks. A non-institutional infrastructure, based on less tangible items such as surveillance, supervision, and assessment was, in effect, built in West Africa.

What are the results ? In 3 years over 100 million people have been vaccinated for smallpox alone. But numbers vaccinated do not tell the story. The crucial question is what has happened to smallpox. We can now report a decline in incidence over the last several years with smallpox reports ceasing in September of 1969.

The second programme concerns measles. In West Africa 5 to 10 per cent of children die of measles. In some areas 20 per cent of hospital beds are involved in the care of children with measles and measles complications. In the past 3 years, 18 million children have been vaccinated against measles in West and Central Africa. Although we have not been

able to eradicate measles on the budget allotted, we have substantially reduced death and disease, and we have freed hospital beds in the process.

Several points are worth mentioning concerning the smallpox and measles projects:

- Health care has been delivered to every person interested, be they rich or poor, one mile from a medical centre or 100 miles from a medical centre.
- Paramedical and non-medical people have been used extensively, both by the US and the African countries.
- An attitude has developed in 3 years that a problem can be approached and solved by a community approach. It should be noted that this was a regional effort including both anglophone and francophone countries.
- Teams of 5 non-medical people have at times vaccinated as many as 5000 people a day for smallpox and 1000 children for measles. Even if they were only 25 per cent efficient with measles vaccine, they were able to prevent 250 cases of measles and 25 deaths in a day. For each worker this means saving 5 lives a day plus unimaginable misery. How many people in this room with degrees and residencies can claim this type of salvage?

SOME SUGGESTIONS FOR MISSIONS

How does a mission hospital get started in community medicine? The answer is to use the principles already employed. For instance, to treat a patient you start with a history of the patient. To treat a community you start with a history of the community, and you can define the community as some manageable geographic area. This history must include anthropological data, such as :

- What does it mean to be sick?
- What is done to avoid sickness?
- What is done to heal sickness?
- Where do people look when they are sick?
- Who gives them advice?
- What is the significance of different foods, eating rituals, births, deaths, marriages, etc.?

This is, in effect, not new information that must be acquired for a community approach, but information which any physician would want to know in order to treat an individual in the hospital. Find out the facts about local customs and include in the history information on vital statistics and local mapping. Obtain answers to the questions:

- What are the population dynamics, the birth figures, the age pyramid?
- What are the population movements?
- What is causing death, disability, failure to work, discomfort?

If you only know about these things from hospital experience, then you know only what the population *thinks* you can help them with. If you let the population decide your priorities (as they do with most hospital and clinic operations), you have failed to exercise your special medical training and knowledge. You have not given the community what they deserve.

Next, with a patient, you do a physical examination. Likewise, with the community, you should do a physical exam. This could be cluster sampling for specific items such as blindness, malnutrition, heights and weights, goiter, etc. But it is also a physical examination of food availability, water availability, quality of water, waste disposal, housing, and precursors of disease.

Next, with a patient, one uses the history and physical to decide whether laboratory examinations should be done and what type of examination should be done. Again, cluster sampling for blood and urine, yellow fever antibodies, parasites in the blood, etc., can be done as suggested by the history and physical. You are now in a position to analyze and set priorities on which problems are most urgent and which can be dealt with.

With the hospital patient, you next set up a surveillance system. You have temperatures charted, blood pressure recorded, as well as repeat testing haematocrits.

With the community, you likewise set up a surveillance system which will provide feedback on selective items, not for a single point in time, but continuously. Local workers can be trained to record deaths and births and keep you informed at specific intervals of key items. Start simply with such things as smallpox, measles, malnutrition and the price of maize, in order to obtain the pulse of the community. Use things which can be recognized and which you can and will respond to. Your response is the key to whether or not surveillance will continue.

Next, find out what is planned in the area by government and other groups so as to complement their work and not compete with them.

Finally, draw up your plans with the fourth dimension of time, including built-in assessment schemes to evaluate objectively the programme on a periodic basis.

PROBABLE HEALTH ACTIVITIES FOR CHURCHES

One cannot predict exactly what your areas of activity will be after you have gone through the 4 above procedures, but they will likely include such things as :

- Nutrition. Few items are as important in most African countries. Endemic, seasonal and epidemic malnutrition can be approached epidemiologically as one would an infectious disease, and malnutrition can be as amenable to control as an infectious disease. You may find an agriculturalist is needed and, in general, one good agriculturalist is better than 10 physicians in a developing country.
- Tuberculosis. How short-sighted to treat a man and have his wife break down with tuberculosis 2 years later. A case of tuberculosis should lead to family treatment in the village.
- Education. If a mother actually understands that her child will not get measles if the child is vaccinated, you cannot keep her away from vaccination.
- Curative work. This will probably be strongly biased towards the greatest salvage, thereby including paediatrics and maternal care.
- Immunizations. Few medical approaches have as favourable a cost-benefit ratio as do immunizations.
- Attention to population dynamics with control procedures as indicated.
- Using the local congregation extensively. It has been said that community medicine is far too important to be entrusted to the medical profession. Our history of medical missions, unfortunately, bears this out. Even in countries with advanced medical care, the majority of healing is done by non-professionals. If I am sick, I may see a professional healer for 10 minutes; but it is my wife, children and friends who cover for me, cook my meals, and provide the support needed while I am a consumer rather than a contributor. It may involve the congregation accepting responsibility in the village, both for their congregation and for others. I have seen examples of Christians taking in a non-Christian member of another tribe so he can get daily streptomycin. I have seen Christians helping to till the soil because a person has guinea worm. The congregation can be used in surveillance as volunteers to provide advance publicity, as volunteers in the mechanics of assembling people, as a core group to learn and disseminate new health information.
- Provision of safe water supplies. Again, sanitary engineers are more valuable than doctors in developing countries. This is one of the points where felt needs meet real needs.

In summary, stewardship includes being a servant but also includes good administration of resources to needs. Hospitals in some places may be a luxury which the church, but not the local community, can afford. It is your responsibility to find out. I have taken the risk of offending you, but I have taken this risk on behalf of a child who travels through life with his potential mental capacity not met because his mother did not understand the need for protein nor the risk incurred by having another child the next year. I have taken the risk on behalf of the father and mother who lose their child from measles in the shadow of their hospital. I have taken this risk on behalf of children yet unborn.

TOWARDS AN APPROPRIATE HEALTH CARE TECHNOLOGY

by Oscar Gish

The following 2 articles were taken from the book "Health Manpower and the Medical Auxiliary", published by the Intermediate Technology Development Group, London, and were printed in CONTACT 8, April 1972.[1]

INTRODUCTION

It has taken many years for today's industrialized countries to advance to their present state. Not surprisingly, the countries of Africa, Asia and Latin America also aspire to create technologically advanced societies. Clearly, this task ought more easily to be accomplished now than in any earlier period, the major reason being the existence of the sophisticated technologies which are flowing from the advances in science to be seen in Europe and North America. It would seem to be a relatively simple matter for countries in the Third World to utilize already existing techniques, many of them highly productive, for purposes of development.

Unfortunately, the mere existence of advanced techniques does not assure the possibility of their application to the problems of developing countries. The technologies which are being developed and utilized in the advanced countries are, as would be expected, suitable for the resource base of those countries. Many of them require a relatively abundant supply of capital, and a scarcity of labour is generally assumed. By contrast, virtually all developing countries are suffering from severe shortages of capital and a vast over-supply of available labour, particularly of the unskilled variety. What is required in countries of the latter kind is a technology designed to take advantage of their large supplies of labour and to minimize the need to draw upon their scarce pool of available capital.

Just as the new technologies of Europe or North America are likely to have only limited applicability to the problems of the Sudan or Malaysia, so too with many of the exciting new discoveries in the various areas of pure scientific research now being carried out in the industrialized countries. Because 98 per cent of all research and development activity is being carried out in the developed countries and only 2 per cent in the developing countries (excluding the Socialist countries from the calculation), the developed countries must inevitably determine the "frontiers of science" on which scientific workers will prefer to be engaged. And, just as inevitably, the frontier problems which will be of interest to scientific workers in developed countries will be those that stem from the socioeconomic conditions of those countries. As such, they will be of only limited usefulness in those parts of the world with very different socioeconomic conditions.

All of this is not to argue that new scientific and technological advances have no relevance to the situation of developing countries, at least in the long run; however, it is fair to say that their usefulness – particularly in the short run – is likely to be limited. One important proviso to the above is the possibility of creating new technologies (or reviving old ones) which are specifically geared to the resources and capabilities of the less developed countries. Most important in this respect is the need to adapt existing knowledge in the interests of development.

One important technological area in which sufficient knowledge either already exists or needs only be adapted for specific conditions is that of medical care. The conditions of morbidity and mortality in developing countries are such that no new medical discoveries are necessary in order to reduce the incidence of disease and death to orders of magnitude which may be only a quarter (e.g., infant mortality) or even a tenth (e.g., childhood mortality) of their present levels.

There exists increasing agreement among those connected with the "creation" and "delivery" of health care that future improvements in these areas will be achieved primarily through innovations in health delivery systems in both developed and developing countries. Although many of these necessary innovations could only be accomplished in conjunction with very far-reaching social, economic and political change, very many others could be accomplished even in the absence of sweeping

reforms. There would be need for changes and adjustments in any event, but none need be totally unacceptable to existing political, social, economic, professional or bureaucratic interests. Any proposals designed to reorientate as complex a system as that employed for the delivery of health care must inevitably meet with numerous resistances, but there is no reason to assume that these obstacles cannot be overcome.

The concept of an appropriate technology for health care recognizes that all countries are subject to limitations in their ability to provide care. No country in the world makes available, or can make available, all of the existing, most advanced medical techniques to all of its citizens. Even in those countries in which access to care is most equitable, such as the Soviet Union and the United Kingdom, there are still differences in the treatment available to, say, those who live in London or in Moscow and those in the far reaches of Scotland or Siberia. The answers to the problems of developing improved health care systems are not to be found, either, simply in the expenditure of larger and larger sums for health purposes. The example of the United States, with its vast expenditure on health care and relatively poor morbidity and mortality statistics, is evidence of this.

The realization that unlimited health care cannot be achieved even in highly industrialized countries has given support to the concept of an appropriate, intermediate health care technology. This concept is even more suitable in countries which may be spending as little as a hundredth part of the amount being spent in the UK for the health care of each inhabitant.

Appropriate technologies are intermediate in nature; that is, they will fall somewhere in the midst of those which use most capital, those which use most skilled manpower, those which are most difficult to maintain, and those which are completely traditional in character. This very wide range of possibilities must be narrowed down in keeping with the requirements of individual countries at specific times. Clearly, what is a suitable intermediate technology for the UK will not be so for Nigeria.

Intermediate health care technologies in developing countries will take advantage of the supply of labour available and conserve capital. One particularly important by-product of such an approach will be to help decrease the catastrophic political, social and economic effects which very high levels of unemployment are having on developing countries.

HEALTH PLANNING IN DEVELOPING COUNTRIES

There are 3 basic reasons why planning for health care must be radically different in rich and in poor countries.

First there are the different levels of resources — money as well as skilled manpower — available to rich and to poor countries.

In 1969 the United Kingdom spent about £40 per head of population to keep its National Health Service operating. The United States spent almost £125 per head for health services in that same year. By contrast, Ethiopia spends around 20p for the health care of each of its 22 million people. The expenditure for health in the UK represented about 5 per cent of the country's Gross National Product. Ethiopia's expenditure represented perhaps 0.6 per cent of its GNP. Even if the Ethiopian expenditure for health care were to be multiplied to a figure equivalent to the UK's, the total outlay would then only be around £ 1.25 per head, i.e. 5 per cent of its budget.

Differences in the availability of financial resources are also reflected in the statistics for hospital beds in rich and poor countries. While there are 10 beds for every 1000 of the population in the United Kingdom, there are fewer than 2 per 1000 in Mexico and only 0.4 per 1000 in India.

The disparity in the number of available medical workers is no less great. In the United Kingdom there is one doctor for every 860 people, but there is one for each 5000 in India, one for each 13,000 in Haiti, and only one for every 30,000 in Nigeria. Also to be taken into account is the fact that doctors are much more evenly spread, relative to population, in a country like the UK than they are in such countries as India, Haiti or Nigeria.

A second basic reason for the need for different types of health planning in rich and poor countries is the differing structure and location of their populations. In a developing country, a third of the population will be under 10 years of age; 2 or even 3 times the percentage to be found in most industrialized countries. Another basic factor will be their rates of increase. In most wealthier countries, population is increasing at between 0.5 per cent and 2 per cent per annum. In developing countries, the increase is more likely to be nearer 2.5 per cent or even 3 per cent.

Distribution of population is also very different in developed and developing countries. Rural areas are likely to hold 50 — 90 per cent of the population of developing countries, but in the United Kingdom only 5 per cent and in the United States only 10 per cent of the population is classified as rural. In addition, the rapid rate of urbanization in poor countries presents special problems. With urban areas increasing at around 6 — 8 per cent a year, the growth of shanty towns is of particular importance.

The third basic reason for approaching health planning differently in rich and poor countries is the drastic difference between existing disease patterns in the 2 types of nation. In the developing countries, there are so many children, and their disease patterns are so inadequately cared for, that half or more of all deaths occur among children under five. In the United States, by contrast, over half of all deaths are caused by diseases of the heart and blood vessels, primarily among people between 50 and 70 years old.

In developing countries, infant mortality (0 to 1 year) may be 4 or more times as high as in industrialized countries, whereas childhood mortality (1 to 4 years) may be more than 40 times as high. Children in poor countries typically die from diarrhoea, pneumonia and malnutrition. The diseases of the developing countries are largely those of poverty.

RESOURCES:

1. Facilities

How then should a country with perhaps 50p a head to spend on the health care of its population (a not untypical figure) utilize its limited financial resources?

In rich countries, the focus of health care has been shifting gradually away from the family doctor/general practitioner to the hospital and hospital-based specialist. This process has not been an easy one and its desirability has been called into question. Desirable or not, it must be recognized that the massive shift to hospital-based medical care is of fairly recent origin and coincides with other aspects of change associated with economic development.

In most low-income countries, the same sort of hospital-based medical care systems are being established, or at least attempts are being made to establish them. However, in the absence of substantial economic development, such hospital-based systems are making impossible the spread of essential health services to the mass of the population. It is not unusual for the capital costs of a large city or regional teaching hospital in Africa to be greater than the entire annual health budget of the country. The cost per bed in such circumstances may very well run upwards of £5000, and that in countries with incomes as low as £30 per head of population.

In principle, teaching hospitals in the capital city function not only as the teaching base for the medical school (as well as being a centre of research) but also as the peak of a medical care referral system. That is, patients from all parts of the country are sent upwards along a health care chain which starts with aid stations or dispensaries or health centres, then moves up through rural and district hospitals, and finally ends with the capital city teaching hospital. Hospital-based medical care and the hospital referral system are, however, likely to work only to a very limited extent. For instance, in Ghana, it is estimated that fully two-thirds of the population are not effectively covered by government curative health services, which are primarily available only at hospitals. The inadequacy of the hospital-based referral system may be illustrated by data drawn from the Mulago Hospital in the Uganda capital of Kampala.[2] In 1964, of all admissions to Mulago, 93 per cent came from the Mengo District in which Kampala is located; even if we exclude obstetrics and gynaecological admissions, 98 per cent of which were from Mengo, the figure only comes down to 88 per cent. Clearly then, Mulago Hospital – at least in its curative work – is primarily serving as a district hospital. The same is true of most others of its kind. They are not truly national health centres.

Rural and district hospitals need not be as expensive as teaching hospitals. A bed in a teaching hospital in Africa will cost about £5000, and a bed in a district hospital perhaps £2000. A rural hospital bed will generally cost half to three-quarters of that figure, and sometimes even less than half.

The cost of equipping and running hospitals is related to their capital costs. But the larger, more expensive hospital will not only have a higher running cost owing to its size; the cost will also be proportionately higher than for the small institution. One major reason for this is that a teaching hospital will have more specialists on its staff, more general duty doctors, more registered nurses, and so on, than a district hospital, and a district hospital in turn will have more than a rural hospital. The more capital-intensive a hospital is, the more skill-intensive it is likely to be.

Poor countries (if not rich ones as well) concerned with reaching the whole of their population with a health service must find an alternative to a system which depends upon hospital beds costing from £1000 to £5000 "or more" each. That alternative is a health delivery system which reaches the population at the most peripheral possible level. The accepted way of reaching a large rural population is through the health centre with its outlying aid stations or dispensaries. The health centre aims to provide the entire health requirements of a family except those which can only be provided in a hospital. A health centre in Africa can be built for somewhere around £20,000 – the cost of 4 beds in a teaching hospital – and can provide most of the health care requirements for roughly 20,000 people. In a country such as Zambia, 250 health centres, enough for the entire population, could be built at the cost of the new teaching hospital in Lusaka.

The recurrent costs of such a health centre are not likely to be more than £10,000 a year, or 50p for each of the 20,000 people covered by the centre. Thus a country with only 50p per capita to spend for health care could still provide basic health care services for its entire population.

Properly staffed, a health centre can supply at little cost much of the medical care required by the people of a developing country. This is because so many of the diseases from which these people suffer are what might well be termed "health centre diseases": conditions which health centres are particularly well able to prevent or treat. Typical functions might include the prevention through immunization of measles (one of the most important killing diseases in many developing countries), tuberculosis, poliomyelitis, smallpox and whooping cough, and, through the health education of mothers, the prevention of the widely prevalent malnutrition in childhood. Most cases of many common diseases can also be readily treated in these centres; among them are leprosy, tuberculosis, pneumonia, gonorrhoea, diarrhoea and dehydration (especially in childhood), malaria and hookworm infection. Health centres can provide family planning services, antenatal care, care of the normal delivery, child welfare facilities, school clinics, advice on environmental sanitation, and curative clinics for a wide range of important diseases. Health centres do not have operating theatres, X-ray plants, or more than minimal laboratory services, nor can they provide a doctor's opinion, so one case in 100 has to be referred to a district hospital; common among such cases are the abnormalities of labour and the consequences of trauma, particularly from accidents on the road. A district hospital in its turn has to refer about one per cent of its cases to a regional or national hospital for specialist opinion or special facilities.

This account of health centre services is, of course, over-simplified in that it assumes an evenly (and conveniently) spread population so that each health centre can cover its required number of people. Many countries, however, have very low population densities with people either scattered in small villages or perhaps even nomadic. Such situations are usually best met with systems of aid stations and mobile clinics run from health centres.

Assuming that the generalized health centre service does cover a country fairly well, it is still necessary to provide certain specialized hospital services in addition; these necessary services do not include radiotherapy, neurosurgery, cardiac surgery, artificial kidneys and organ transplantation.

The kind of hospital services required in poor countries must be provided in what are usually known as district hospitals, even if such hospitals have to be built in large cities where a number of them can be located in order to provide sufficient scope for teaching and many research purposes. A crude "guestimate" would indicate that for 50p per head, it would be possible to run a network of such hospitals so as to cover an entire population. However, this would mean spending £1 per person (50p for health centres plus 50p for hospital services) for health care instead of the 50p now being spent generally in Africa or Asia. The choice would then be either to reduce health centre or hospital coverage, or to raise expenditure on the health services. For a country with a per capita income of, say, £40, to spend £1 per head or 2.5 per cent of the nation's GNP for health expenditure would not be unreasonable. (Developed countries spend twice that figure, and underdeveloped countries are spending considerably more on, for example, education.)

2. Staff

The kind of facilities employed for delivering health care are critical in determining the type of personnel employed. Large capital city hospitals, of the type discussed earlier, require specialist and other highly qualified staff if they are to do their proper jobs, namely, specialized medical research, teaching of highly qualified staff, and the care of patients suffering from the 0.1 per cent of health problems which cannot be handled adequately in smaller, simpler institutions. In many developing countries, there is not sufficient staff to run the existing large hospital facilities. Ethiopia, for example, has built a large new hospital for teaching purposes without any immediate prospects of staffing it. In this connection, it is worth noting that, in Africa, the number of doctors per head of population actually declined between 1962 and 1965, as a study of 2 groups of 13 francophone and 13 anglophone countries has shown.[3] In 1965, among these countries, there were 3 with one native born doctor for less than 20,000 inhabitants, 9 with one doctor to 20,000–50,000, 11 with one to 100,000 and more, and 2 countries with not one indigenous doctor at all.

These figures, however, do not show the real situation because of the concentration of medical personnel in the capital cities. In 11 African francophone countries in 1965, about 60 per cent of the indigenous and 50 per cent of the expatriate doctors were located in the capital cities.

Health centres, in contrast to hospitals, can be operated by a variety of men and women with middle-level skills, even in the virtual absence of anyone with a university education. The variety and scope of auxiliaries, as well as paramedical staff, has been outlined elsewhere. Here it will suffice to say that, in general, the various types of auxiliaries make up a skill continuum which extends from those with very little education and training (say, 6 years of

schooling and virtually no training) to those with complete secondary education plus a number of years of training.

Paramedical staff should not be confused with auxiliaries; they include registered nurses, pharmacists, laboratory technicians, health inspectors and other staff who are fully qualified professionals. They usually do not, however, have the university education required of doctors, although their international status is usually recognized.

Medical assistants are the key auxiliaries. They are the major providers of primary medical care in many African and Asian countries. For example, in Kordofan Province in the Sudan, there were 2.1 million inhabitants in 1969. This population was served by 36 doctors located in 12 hospitals; there were also 81 medical assistants in 81 dispensaries, and 126 qualified nurses in 126 dressing stations. It is these medical assistants and qualified nurses who were providing the bulk of the health care for the people of Kordofan Province.

At present, the Sudanese medical school in Khartoum is producing 30 graduates per year. It is proposed to raise that number to 160 by 1975. Is it then reasonable to expect that, given time, doctors will gradually replace medical assistants in the Sudan?

The education received by medical students in the Sudan is virtually indistinguishable from that of medical students in, say, the UK; that is, medical education which is very much in tune with hospital-based practice and entirely consonant with employment in a large city. At present, over a third of all Sudanese doctors work in the capital city, where about 5 per cent of the population live. In future, the increased output from the medical schools is likely to find itself concentrated in the capital city to an even greater extent than is the case at present. This phenomenon can be seen clearly in other countries in the Middle East and Asia (e.g., India, Pakistan, Iran) which have been rapidly increasing their output from medical schools but can still show no very significant increase of doctors outside the capital cities and other large towns.

In time, as the larger cities become saturated with doctors, some will have to move to the smaller centres. But perhaps an even greater number will escape the burden of excessive competition in the cities by emigrating to another country altogether.

In the United States, there are already 25,000 medical graduates from schools in developing countries, and in the UK there are close to 10,000 doctors who were born in Asia and Africa, primarily in the Indian subcontinent. Canada, Australia, Germany and France have also become the beneficiaries of medical personnel born (and usually trained) in the Third World.

The medical "brain drain" from the developing countries is an extension of the general problem of providing medical education and health manpower planning which is suitable for the conditions of poor countries. If doctors are trained in postgraduate specialties, of which poor countries can support relatively few practitioners, it is inevitable that numbers of them will emigrate. The crux of the problem is whether to train doctors for the needs of the mass of the population who are rural dwellers with low effective economic demand, or for those relatively few urban dwellers who have a high effective economic demand. If the increasing numbers of medical graduates in developing countries are all to enter into urban competition with each other, some of them must necessarily emigrate; they cannot all practise successfully among the relatively small urban middle and upper classes.[4]

It is clear that careful attention must be paid to the likely effects of a particular kind of medical education and further specialization. If international emigration of doctors is "only" an extension of the rural-urban migration problem, the type of medical education that will forestall international emigration is also likely to increase the number of doctors working in the countryside.

Medical education has to be geared to the type of health problem experienced by a given country's entire population. If 80 per cent of the population is rural, then 80 per cent of the medical students should be educated accordingly. Because the causes and prevention of illness, disease, and death vary in rural and urban areas, the 80 per cent or so of doctors who should be preparing for work in rural areas must come to know the causes that are connected with rural life, and the consequent methods of prevention of illness, disease, and death in those areas. Successful medical education, intended to produce doctors for rural areas, should be orientated towards work in those areas, and new curricula must be designed for such purposes.

Two corollaries which follow from the above discussion are: first, the desirability of producing a doctor with the minimum and therefore the least expensive training necessary to fulfill his or her duties; and second, the need for at least part of that person's medical training to be carried out in a district or rural hospital in the countryside.

The solution to the problem of how to retain doctors in their own countries, and in rural areas, is to be found in their training. Those who are chosen to study medicine must be committed to the health requirements of the mass of their country's population. Their education must then reflect their commitment. It is too late after medical education has been completed substantially to change the pattern of a doctor's life. That pattern has already

been set by the nature of the training received. If medical training has prepared doctors only for medicine as practised in a modern teaching hospital, they must then either practise in their country's capital city or go abroad.

Tax and housing incentives might be among the means for drawing doctors to the countryside. Still more desirable are active health centres and good and interesting professional conditions in the rural areas. Travel, promotion and honours should go to rural medical workers in recognition of their important work. Needless to say, the national health budget should be allocated fundamentally in keeping with the nation's population distribution.

It is, however, suitable medical education that can lay the foundation for keeping doctors usefully employed in their home countries. Part of the process of suitable medical education is a selection process. The likelihood of a given medical student remaining at home upon completion of his/her studies is one key element in a properly organized medical selection process.

In a developing country, one of the doctor's main roles is to act as teacher, supervisor and consultant to a team of auxiliaries. The doctor is most often required to fill this role by supervising a series of health centres in the rural areas or by running a district hospital, and this not only for a year or two after qualification, but for the majority of his/her professional life. There is an increasing realization that the best way of achieving this state of affairs is not to train doctors in lavish, thousand-bedded, chromium-plated, multimillion-pound teaching hospitals which accustom them to facilities that cannot be reproduced elsewhere in the country, and which therefore dissuade them from working subsequently in a district hospital. Rather, it is to train doctors under conditions which are much closer to those in which they will later have to work, particularly in district and rural hospitals. This is indeed the policy of the new medical school in Zaria, Northern Nigeria, which is breaking away from the traditions set by earlier medical schools in Africa with their inappropriate, if otherwise excellent, patterns of training.

What is required, then, is a sufficiency of suitably trained doctors equipped to lead teams of medical auxiliaries. These teams should be part of a health centre service (under a director of health centre services) which acts as the basic carrier of health services in the country. Such a health centre service should be the base upon which all other health care in the country rests. The focus of medical attention must be shifted from the big teaching hospital on the capital city hilltop to the unobstrusive health centre in the village.

POPULATION: STRUCTURE, LOCATION AND GROWTH

The populations of developing countries are young, fast-growing and still primarily rural in spite of rapidly increasing urbanization. All of these demographic imperatives give rise to special health care considerations.

The diseases of children in developing countries are particularly amenable to prevention in contrast to cure. The major killing diseases in poor countries are the group of childhood diarrhoeas, pneumonia and protein calorie malnutrition (PCM). Following behind this "big three" are tuberculosis, intestinal helminth infections (worms), measles, whooping cough, malaria and accidents.

The nature of these diseases, coupled with the age structure and rural docimile of the population, supports the view that the health centre and the medical assistant are the basic instruments upon which the health services must rest. Not only can health centres fit more closely into the rural health as well as the general rural environment, they can also offer an appropriate base for family planing work within the context of maternal and child care activities.

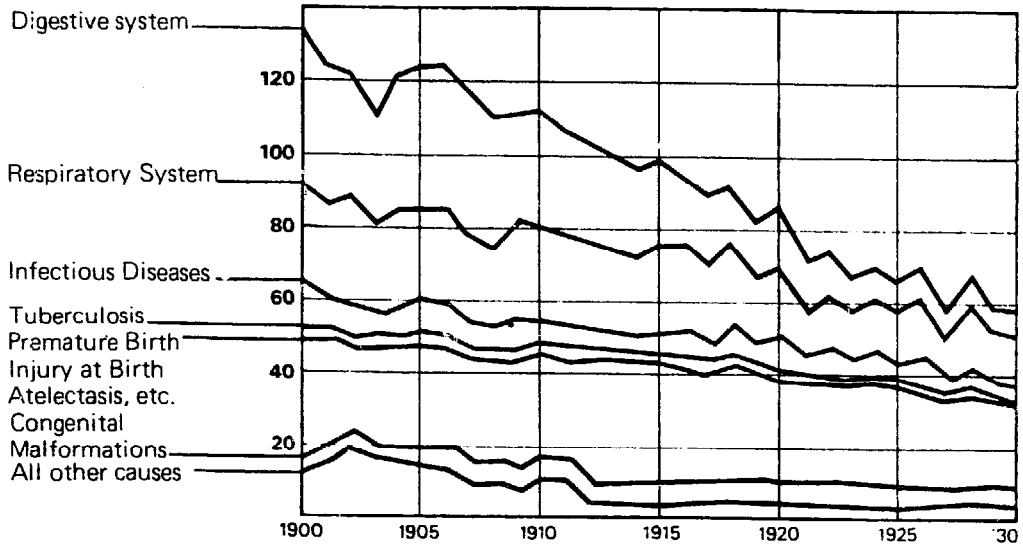
Maternal and child health care can be best, if not only, carried out close to or within the home environment of the woman and her child, that is, mainly within the village. An exhibition of slides showing the dangerous diseases borne by mosquitoes or snails, which is seen in a two-room mud dwelling belonging to "one of us", takes on a significance which cannot be achieved in the context of a large impersonal hospital building which belongs inevitably to "them".

The special problems connected with rapid urbanization must also be kept in mind. The crowding together of large numbers of people into small, insanitary areas has placed intolerable strain on health and social services in the towns and cities of developing countries. Probably no other measures could do more to improve the situation in these urban slums than the provision of fresh water in adequate quantities and the installation of proper sewage disposal systems together with a general improvement in sanitary and hygienic conditions. Beyond these, there are all the social services necessary to deal with conditions which are making for increasing veneral disease, mental illness and other social illnesses in the growing slum areas which threaten to engulf many towns and cities in Africa, Asia and Latin America and more than a few in Europe and North America as well.

DISEASE PATTERNS AND THE ROAD AHEAD

It has already been indicated that the types of

INFANT MORTALITY BY PROMINENT CAUSES IN NEW YORK CITY
(rates per 1000 births)



diseases to be found in tropical countries are, in the first instance, to be treated as aspects of poverty rather than of the tropics. This point can be nicely illustrated by data drawn from the medical history of New York City.

Throughout the 19th century, the death rate in New York remained constant at about 30 per 1000. A substantial part of that death rate was due to a level of infant mortality which was not unlike that which is to be found in developing countries today. As shown in the graph, the first 3 decades of this century saw a dramatic decline in infant mortality in New York City from 140 per 1000 to less than 60 per 1000. Of that fall, two thirds occurred in the diarrhoea-pneumonia complex of childhood diseases.

This striking decrease was accomplished by a series of measures taken early this century. Some of the specific public health developments of the period included an improved water supply, better control over and distribution of foodstuffs, and the inauguration of visiting nurse services and well-baby clinics. This period also saw the growth of paediatrics and, perhaps particularly important, major campaigns against illiteracy and a substantial increase in primary schooling.[5]

It is not possible to argue that a specific set of measures taken in the particular circumstances of New York City at the turn of the century are necessarily relevant to all, or indeed any, of the countries in Africa, Asia or Latin America today. What is clear is that the road leading to the reduction of morbidity and mortality is not necessarily paved with advances in medical science. In fact, the technological possibilities inherent in already existing knowledge about the causes, prevention and cure of disease are far greater than our social and political (not to mention economic) ability to utilize those possibilities fully.

The same road is more likely to be paved with social and political advances, reflected in an improved system for the distribution of health services, rather than with further scientific advances as such. This last is probably not only true for poor but for rich countries as well.

BIBLIOGRAPHY

1. Gish, Oscar (ed.) *Health Manpower and the Medical Auxiliary.* Intermediate Technology Group, London. 1971.
2. Hamilton, P.J.S. & Anderson, A. "An Analysis of Basic Data on Admissions in 1963 and 1964 to Mulago Hospital, Kampala."
3. Vysohlid, J. *Health Manpower in the African Region.* Economic Commission for Africa Working Party on Manpower and Training, Addis Ababa. Un Economic & Social Council mimeo. 1968.
4. Gish, Oscar. "Medical Education and the Brain Drain". *British Journal of Medical Education,* Vol. 3, No. 1, pp. 11-14.
5. McDermott, W. "Manpower for the World's Health." *Report of the Institute of International Health Education.* Van Zile Hyde, H. (ed.). 1966.

INTERMEDIATE TECHNOLOGY IN MEDICINE

by Kenneth R. Hill

INTRODUCTION

In Northern Nigeria, there is one doctor to 150,000 people, and the problem of how to deliver medical care both in quantity and in quality to such a population requires urgent solution. The conditions found in Northern Nigeria are similar to those in many of the developing countries.

In 1965, the World Health Organization laid down a minium target for the next decade of one doctor for each 10,000 of the population. Throughout Africa (excluding Egypt and South Africa), the average doctor/patient ratio was then 1:20,000. To meet the WHO target, an increase in the number of doctors in Africa from 10,000 to 24,000 was needed immediately. This was roughly equivalent to the complete 10-year output from all the medical schools in Britain. Northern Nigeria alone would have required 17 times as many doctors to look after its 30 million people as it then had, i.e., 3000 instead of 175 ! In 1965, no local medical school existed, and the first 30 doctors from the new medical school in Zaria will qualify only in 1973. At this rate, it would need 100 years to provide 3000 locally trained doctors to look after the people of Northern Nigeria, and the population there is expected to double by the year 2000...

RESOURCE HANDICAPS TO THE TRAINING OF PHYSICIANS IN DEVELOPING COUNTRIES

Recruits for physician training must already have received a high level of secondary school education. Most developing countries are handicapped by gross deficiencies in the primary and secondary school infrastructure. In East Africa, out of 1000 children attending primary school, only 10 go to secondary school and only one continues training after leaving secondary school. Educational priorities in developing countries may have to be slanted towards increasing the supply of primary and secondary schools rather than establishing more centres for higher education in the form of universities. But physicians can only be trained at university level. The medical school has to compete with other equally important disciplines such as agriculture, engineering and education among students eligible for university places.

To this handicap is added the phenomenal cost of producing a doctor. It is estimated that the cost of training a physician is £15,000 in the UK and £22,000 in the USA. In his recent book *Health and the Developing World,* J.H. Bryant estimates that in medical schools in the developing world it costs at the moment up to 65 per cent more to train a student than the £22,000 this costs in the USA. The new African medical schools, such as Lusaka, Zaria and Addis Ababa, hope to bring their cost per student down to below even the British level, but they all have yet to graduate their first new physicians. In any event, teaching hospitals are very expensive, and Mr Gish shows how maintaining a university teaching hospital can "milk" the slender resources available for health care in a developing country to the detriment of other services, especially rural health. (Chapter II, Part 1, p. 6)

MEDICAL TRAINING UNSUITED TO DEVELOPING COUNTRY NEEDS

Even if the countries concerned could afford the high cost of training large numbers of physicians, too little thought has so far been given to what type of doctor should be trained. In the West, the modern medical school curriculum demands a high level of education in the basic sciences, is highly specialized, and uses sophisticated equipment and techniques; it is almost entirely hospital-orientated. There is little emphasis on community and preventive medicine, on public health and health education. This type of training does not prepare the student for the pastoral and general duties required in developing countries. The majority of the sick do not need the complex hospital facilities

which are part of modern medical thinking and education; but the doctor has not been trained in selection and tends to want to practise in the shadow of the hospitals which are in urban areas. The diseases of the masses, which are in the rural areas where perhaps 75 per cent of the people live, are ignored, whereas the outpatient and inpatient departments of the district general hospitals in the towns are swollen to gigantic size, cramming the hospitals with people in numbered anonymity. In India today, for example, roughly 80 per cent of the population lives in the rural areas, whereas approximately 80 per cent of the doctors are to be found in the towns and cities.

GUIDELINES FOR PHYSICIAN TRAINING

The test of any educational programme lies in what the person actually is able to do, not what he or she has been taught. Dr F. Rosa, after considerable experience in Ethiopia, has suggested some guidelines for the training of a doctor who is to work in a developing country.

In a paper entitled "A Doctor for Newly Developing Countries : Principles for Adapting Medical Education and Services to Meet Problems", (*Journal of Medical Education,* vol. 39 No. 10), he writes that where there is only one doctor for as many as 150,000 patients, Western methods of training, even if intended for general practice, are inapplicable. The doctor cannot alone cope with each individual case but must be trained as a leader in health programmes. This training should be designed within the context of local problems and should include the following:

1. Orientation towards the practice of preventive medicine and public health at community level. This means the development of health services within limits which the people can support locally.
2. Training in the instruction and leadership of auxiliary workers. These may be people such as nurses, laboratory technicians and sanitarians who are literate and will already have received some kind of formal training. Alternatively, the auxiliary worker may be indigenous and illiterate. The latter, however, given a brief training and modern tools, can often achieve a greater reduction in sickness than the best doctor managed to achieve 25 years ago.
3. Instruction in handling mass campaigns against, for example, smallpox, tuberculosis, syphillis, trachoma and malaria, together with a widespread health education programme.
4. The development of community self-help programmes, e.g., better water supplies, improved drainage.
5. Knowledge of maternity and child health needs. In any developing country, a large proportion of the population will be children, and improvement in nutritional standards, widespread immunization against communicable diseases and instruction in methods of family planning are vital.
6. A sympathetic appreciation of local culture and resources. Effective medication should be, as far as possible, cheap, simple, practicable and suitable for use in field or clinic rather than in a hospital.

INTERMEDIATE TECHNOLOGY IN THE FORM OF INTERMEDIARY MEDICAL PERSONNEL

Dr Rosa's proposals make use of intermediate technology in the form of intermediary medical personnel such as nurses, medical auxiliaries and sanitary workers who work as a team, led by the physician. Dr Rosa's practical suggestions make good use of the delivery of medicine to large numbers of people and also emphasize the prevention of disease, a subject which receives too little attention. Nigeria spends 6 times as much on curative medicine as it does on preventive; yet it has been estimated that even a doubling of the expenditure on preventive medicine would transform the whole medical picture there.

Dr Rosa suggests using intermediary personnel in the delivery of health care, and to some degree his suggestions are already being accepted in the West. The identity and status of intermediary personnel must, therefore, be clarified so that they can be accepted as an essential part of the world health scene. It cannot but be admitted that objections are raised by the established corpus of doctors to the use of auxiliaries in medicine. The medical profession jealously guards its right to diagnose and to prescribe, yet, in actual practice, doctors are often forced to delegate this responsibility.

In the past, an auxiliary (or in this particular case a second tier doctor) was extensively used in India, and was called the licensed medical practitioner or surgeon's assistant; in other territories, another intermediary grade was known as the medical assistant. These systems worked well, for in practice it was found that the job was conditioned by the environment rather than by any particular scheme for medical education or any government's particular health policy.

As many newly emerging countries achieved independence, this well-tried form of medical practice was often discarded; but now even the more sophisticated countries are being forced to adopt a policy of delegation of responsibilities. This can be seen in both the USA and the UK. In the USA, owing to the lure of specialization in medicine, there

is a dearth of general practitioners, of doctors or primary contact, and intermediary medical personnel being trained include the physician's assistant at Duke University in North Carolina, the nurse practitioner at Denver in Colorado, and the "medexes" in Seattle, Washington, and various other places. Altogether 28 such training schemes have received support from universities, state medical associations and government, and these practice assistants give primary medical care to thousands of people. In the UK, for similar reasons, general practitioners are in short supply, and health centres are being developed in association with the delegation of responsibilities to a host of intermediary personnel such as midwives, district nurses, health visitors and social workers. In the USSR, the "feldsher" has been established for many years, especially in rural areas. The feldsher resembles a nurse but receives extra training in diagnosis and treatment, and there are almost 400,000 (most of them women) in practice in the Union. Intermediate medical personnel like those already described, differing perhaps in skills but still part of the national medical team, have been used for years past in Sweden, in Spain (the "practicante"), and in France, where the druggist in a French pharmacy dispenses a considerable amount of advice and treatment and could well be compared with the English apothecary of an earlier age, who became the general practitioner. In New Zealand, there is a newly established training school where medical receptionists receive a year's training to enable them to act as "doctor assistants". The first intake of students have recently completed the course and are being well received by the public.

Although the use of intermediary personnel is on the increase, resistance to their recognition continues, and this is often even stronger in the developing countries than it is elsewhere. It is hard to understand the rationale of such opposition. It is true there is a remote danger of people with less advanced training developing inflated ideas of their own capabilities, but such people can only be relatively few and they will be found at the fringe.

CONCLUSION

It must be obvious throughout the world, and particularly in developing countries, that we have not the resources or the educational infrastructure to produce the needed number of doctors through university training. Measured against the national incomes of developing countries, the financial burden of educating masses of physicians cannot be tolerated. It seems only logical that this vacuum, which has been created by the present methods of training and practice, must be filled by a well-trained and disciplined corps of intermediary personnel.

These team members must have status, and the responsibility which goes with that status, if well-balanced health teams are to be established. The doctor can no longer be an individualist and an authority in his/her own right. Instead increasingly, and particularly in hospital work, the doctor is becoming the leader of a team in which auxiliary personnel have their rightful place. Such an attitude must now extend from the hospital to the rural areas and to national health services throughout the world.

If doctors wish to preserve their own status, they have to remember their true role of service within and to the community by the application of scientific thought for the relief of humanity's estate. Medicine is to do with people. Although the practice of medicine today is so advanced that academic training is essential to a physician, rather than the old type of apprenticeship, the doctor of the future must not lose touch with the general practice of clinical medicine and the means of delivering health care to society. This will involve a new approach to medical education and the establishment of many more training schemes for intermediate medical personnel. The medical profession itself must be prepared to undertake the responsibility for planning the training and the use of medical auxiliaries throughout the world.

USING MEDICAL AUXILIARIES: SOME IDEAS AND EXAMPLES

by Dr Katherine Elliott

This article was taken from the book "Health Manpower and the Medical Auxiliary", published by the Intermediate Technology Development Group, London, and was reproduced in CONTACT 11, October 1972.

INTERMEDIATE TECHNOLOGY: SOME PROPOSITONS

- The medical auxiliary is a substitute, an alternative to a physician in certain special circumstances. The medical auxiliary is not a substandard doctor.
- The medical auxiliary receives a short, practical training. This is often better suited to local educational levels and to the community's immediate needs; it certainly costs considerably less than full professional training as a physician, much of which is theoretical.
- Expensively trained physicians should be sensibly used in any country. To delegate suitable responsibilities to specially trained auxiliaries is not a detrimental dilution of standards of medical care.
- An adequate number of well trained auxiliaries properly used must be better value than too few doctors desperately attempting the impossible.
- Medical auxiliary training schemes should be planned ecologically with a liberal imagination, frequent revision, local and sympathetic evaluation.
- The compromise of temporarily accepting the second best instead of the best shows courage combined with common sense; further progress towards achieving the best is not automatically excluded.
- It now makes just as much sense in North Carolina as it does in Kenya to select, train and use medical auxiliaries to deal with the simpler medical problems. In both places this approach to the shortage of skilled personnel for health care benefits the community and the individual.

THE MEANING OF THE TERM "MEDICAL AUXILIARY"

It is important to get clear at the outset the meaning of the term "medical auxiliary" to avoid later misunderstandings. The World Health Organization defines an auxiliary as "a technical worker in a certain field with less than the full professional qualification". Professor Maurice King in *Medical Care in Developing Countries* makes a point which is vitally important to the whole idea of medical auxiliaries, namely that an auxiliary is a substitute, an alternative, rather than a complement to the full professional. The auxiliary is not the same thing as a physician but in some circumstances can substitute for one; he/she should never be thought of as a substandard doctor.

THE NEED FOR MEDICAL AUXILIARIES

The 2 most obvious obstacles hindering world progress towards better health are lack of money and lack of skilled personnel, the latter in some ways stemming from the former. Both problems beset all countries in varying degrees according to economic development and the type of medical care which the people have learned to expect. Expectations everywhere are rising with the increasing speed of communication and improving education. Preventable death due to poverty is no longer easily accepted as an unalterable fact of life. Development problems are exercising the thought of many, and no country can afford to be smug. Teilhard de Chardin's "planetization of man" is inevitable and one possible, though highly idealistic, solution is that our health and our food, so inextricably interlinked, should be taken out of a narrow national, political and economic context and regarded together as world problems needing world solutions.

Meanwhile, realistic remedies must be more widely used. The intermediate technology solution makes excellent sense because it allows for the use of people with different degrees of skill and for the use of different physical resources. It is adaptable to the improving circumstances which it may itself initiate, and it can start at once.

It is a sobering thought for the future of terrestrial evolution that the very simplicity of solutions seems to inhibit their adoption; they require our too immediate action. "The difficult must be done at once; the impossible may take a little time," someone said in wartime. To this might well be added: "But the simple, inexpensive answer to any problem must have no peace-time place."

Ad hoc remedies in the closely related fields of nutrition and health should be acceptable in the short term but conceived as a basis for longer range planning. For example, in many poorer areas, protein deficiency could be alleviated by encouraging the cultivation of green vegetables, peas and beans and by the local extraction of protein from inedible leaves and other materials.[1] Within every population, whatever its educational level, suitable recruits can be found and trained as medical auxiliaries to provide at least a better standard of health care than is now available to those most in need of it. Advanced technology may be an eventual better answer, but intermediate technology can help immediately at the existing local economic level.

A LABOUR-INTENSIVE APPROACH TO HEALTH

Physicians are scarce almost everywhere and the cost of their training is soaring as biomedical knowledge expands. Even in the most affluent countries, medical care as we know it is pricing itself out of the market, and there is much talk of teamwork in medicine. The composition of the team will be guided by the range of skills readily available in the first instance; the principle is well adapted to an economy of poverty, although equally applicable in richer countries, and it has an in-built capacity for gradual sophistication as the opportunity arises. The labourintensive approach to medical care is that familiar to mass production: i.e., the final product is split up into parts, each of which can be supplied by someone with a special but limited skill, whose training is therefore less expensive than that of an operator with a multitude of varying talents. In the end, the product costs a little less; more people can therefore afford to buy it. It may not be the same as the craftsman's made-to-measure article; it may not last as long or be as satisfying aesthetically, but it will reach more people who need it and there is no reason why it cannot be redesigned fairly frequently with a view to improvement in the light of experience.

SUBSTITUTES FOR PHYSICIANS

Medical auxiliaries do not replace doctors, but they may substitute for them in certain routine conditions. On occasion, they may be more useful than any doctor, as in simple health education or midwifery; but their training will have cost less, and therefore auxiliaries may be paid less than the professionals for whom they may substitute.

Professional prejudice about shifting status is out of place because demands and needs are already compelling this commonsense solution of the downward delegation of responsibility to less expensively trained personnel. Such delegation can mean that a different type of care has to be given and, if this is to succeed, it must be acceptable both to the recipient and to the professional who takes final responsibility for the ill person. It is unfair to make too much of some of the current criticisms of the use of medical auxiliaries, whose performance has not so far been properly evaluated; many of the opinions are based on individual experience and personal prejudice. Whether people favour the idea or oppose it, some such cadre within any health service must inevitably emerge to make the decisions for which more highly trained personnel are not essential. Professionals will be constrained, henceforward, to limit their activities for the most part to leadership, consultation and management.

The gap between the physician and the medical auxiliary should be wide enough to be easily distinguishable. It is important to maintain this clearly visible gap to avoid possible friction, although a carefully controlled upward revision of the status of the more highly trained medical auxiliaries in recognition of their experience and acceptance of retraining should be part of any satisfactory health service. Particularly in the developing countries, a medical auxiliary may have to be prepared to deal with just as wide a range of health problems as any physician although, in view of his/her substitute status, will obviously be better prepared to work in the more routine areas of health care such as preventive medicine, maternity and child welfare, environmental health and health education. The auxiliary's ability will depend on his/her basic level of education and the skill used in planning training to make the most of all available resources. At certain educational levels, a country may be making better use of scarce resources by training many medical auxiliaries rather than a few doctors, because there is a much bigger pool of potential recruits for auxiliary work. There must be, at the same time, a means of making the most of the more capable auxiliaries through further training after intervals of experience.

Auxiliary educational programmes must evolve ecologically in terms of the particular society. They should be planned by people who understand local conditions. Then they must be tried, reshaped and tried again under the conditions in which they are to be used. They should also be evaluated locally without too much cross-cultural discouragement.

THE AUXILIARY'S SKILLS

A medical auxiliary should be able to :

1. Undertake the care of the sick wherever necessary in local conditions: e.g., in the community or at a health centre or hospital.
2. Either treat the sick independently, or else arrange for them to be referred to someone more skilled; the auxiliary must know enough to judge how urgent is the need for referral.
3. Think about the community as a whole, assess its problems and needs in order of priority and suggest solutions making the best use of limited resources.
4. Understand the value of, and be able to undertake, health education with the aim of improving the health of the community, not just of treating the sick.
5. Apply to his/her work an open, inquiring mind, receptive to new ideas without necessarily rejecting all tradition.
6. Understand what a physician does and how an auxiliary's work relates to the doctor's role.

TRAINING AUXILIARIES: THE NEED FOR A SIMPLIFIED APPROACH TO TEACHING HEALTH CARE

Physicians, we hope, are taught enough about all relevant subjects to enable them to reason out the probable correct solutions to problems. To train as physicians, people must have an extensive basic education. Medical auxiliaries begin with a lower level of basic education, often very little indeed, and they receive a shorter training, sometimes extremely brief. The amount of responsibility they can learn to take naturally varies with the ability of the student and the background into which it must be fitted, both within the community and as part of the country's health service. A medical auxiliary need not be able to make a specific diagnosis, but must be able to identify an illness sufficiently to know how to manage it. Patients' problems can be grouped in patterns, and the auxiliary learns to choose the pattern which fits the problem from the history, physical examination and simple laboratory tests necessary to confirm the choice, if any is required. The depth to which the problem is to be investigated depends very much on the needs of the patient and on the auxiliary's own limitations in resources and time.

TEACHING OF PATTERNS OF MANAGEMENT FOR PATTERNS OF ILLNESS

The auxiliary need learn only enough anatomy, physiology and pathology to understand the pattern of management of a disease; the basic science knowledge is fitted together with the skills and attitudes used in dealing with the sick person. Patterns of management will vary in complexity according to local conditions and resources: e.g., difficulties of referral. They will possibly involve further diagnostic steps and/or treatment and/or referral.

For instance, the common syndrome of gastro-intestinal infection which presents as diarrhoea, vomiting, abdominal pain, fever and dehydration will require a pattern of management to rectify fluid loss and to rest an over-active digestive system. What drug, if any, is used may depend on whether an accurate diagnosis can be made. Available aids to diagnosis may be a simple laboratory test, the appearance of other similar cases, the likelihood of its being a disease common in the area and within the auxiliary's previous experience, the ease or difficulty of referral to a more experienced consultant and, finally, a clinical trial of whatever suitable drug is at hand and which is likely to be effective. The degree of fever and distress will influence the choice of drug, if a choice exists, and auxiliaries can learn to gauge the degree of dehydration adequately enough for them to apply promptly whatever relief measures are within their competence. Making the distinction — the differential diagnosis — between this commonly occurring condition, or the equally ubiquitous parasite infestation, and an acute abdominal emergency should not be too difficult and will not necessarily interfere with the initial general pattern of management.

Similarly, there will be a pattern for the general measures to be adopted in dealing with such conditions as acute pyrexia, respiratory disease, congestive heart failure, head injuries, penetrating wounds, tumours, skin diseases, eye infections, all forms of malnutrition, and so on.

In the same way, auxiliaries can learn to assess the health of a community, work out the needs and start patterns of improvement. Medical auxiliaries are recruited from among those with a middle-school education. (If they have already had more education than this, they should then continue and become full professionals.) To average intelligence a strong vocational urge should be added for real success (see J.S. Horn's description of the recruiting of "peasant doctors" in Chinese communes[2]). The increasing use of medical auxiliaries in more affluent societies provides a most useful outlet for people with such a vocational urge who lack the educational background necessary to enable them to become full professionals (for instance, the Duke, Denver and other schemes). It must not be forgotten that people already get much advice about their health problems from non-professionals: grand-mothers, first-aid workers, herbalists, anyone em-

ployed in any capacity in a hospital, surgery or chemist's shop. Persons such as these, given a suitable training, can form part of a health service network to benefit their community. Recognizing the value of extending health care in every society through the use of auxiliaries is rapidly making sense all over the world.

SOME EXAMPLES FROM COUNTRIES ALREADY TRAINING AND USING MEDICAL AUXILIARIES

1. USA — North Carolina: the Duke University Scheme; the Physician's Assistant

In North Carolina the physician/population ratio is low and trained personnel are short in all areas of medical care. Physicians in the Duke University Medical School decided to train assistants to extend or augment their own work in a variety of settings or circumstances. They were prepared to take the responsibility themselves for using such assistants under constant, direct supervision. The assistant may either have highly specialized skill (e.g., in a renal dialysis unit) or broad general skills suitable to family medical practice. These are the criteria used in selection:

1. High-school education: e.g., 10-12 years' schooling.
2. Personal recommendation.
3. Good results in intelligence and personality tests.
4. Previous experience in patient care: e.g., as medical corpsmen in military service, practical nurse training, etc.
5. Personal interview.

A 2-year course started in 1965 with 3 recruits. There were 9 the following year, and there have been 12 each year since. Over 1 000 people ask each year for information about the course, but selection is rigorous. Graduates so far are employed either within Duke University Medical Center, or by private physicians, or in other hospitals or medical centres.

The work of the physician's assistant is very like that of the junior resident doctor, but the assistants do not make diagnoses, write prescriptions or initiate treatment. They take histories, make physical examinations, carry out many routine procedures such as venepunctures and intubations, and supervise tests. They present the patient's case to the physician.

Physician's assistants have been accepted by both physicians and patients, but their legal status is difficult. It may be that the physician will have to be licensed to employ the assistant. Another suggestion is that they should receive a degree at Bachelor of Science level. The Association of American Medical Colleges has set up a task force to report on training programmes for physician's assistants. Dr Paul J. Sanazaro, Director of the National Center for Health Services Research and Development, spoke recently on "The R and D Approach to Health Manpower in the 1970s" to the American Medical Association Conference on Physician Support Personnel.

The Duke training scheme lasts 2 years. A preliminary 9 months of academic courses covers applicable basic science with some introduction to clinical medicine. Teaching is organ-orientated and is combined with relevant laboratory work and the learning of clinical procedures. During the last 6 weeks, students learn physical diagnosis, about community health and such specialized procedures as electro-cardiography, radiography and data processing.

Four periods, each of 8 weeks, follow and are spent in clinical rotations. Students work in controlled surroundings in hospital or medical centre in defined areas of medical care. They apply information already learned and are individually taught additional special skills. The first period is spent on inpatient ward work, the second in outpatient work, and the third in community medical work. The last period involves special experience with public health units, insurance agencies and voluntary health agencies. The rest of the 2-year course is spent in special training, depending on the trainee's particular interest and future plans, in cardiology, paediatrics, neurology, general surgery, etc.

Already certain results have been noted:

1. A practical model has been developed showing how the output of the physician in community practice can be increased without detriment to standards of care.
2. The scheme shows a way of producing highly skilled technicians for special care areas within a medical centre.
3. If this type of personnel could be produced in sufficiently large numbers, the scheme shows how the rise in medical costs can be slowed down.
4. The interests of the medical school and the social sciences division of the university have been brought closer together for better interchange of ideas and perhaps joint research.
5. Medical students and newly-qualified physicians see that delegation is possible and teamwork worthwhile.
6. Those who would like to undertake medical care but who lack the proper educational background can now be accepted for a rewarding career.

2. USA — Colorado: the Denver Pediatric Nurse Practitioner

This scheme started because there were not enough paediatricians to provide adequate health care in the area. The programme is now 4 years old. The University of Colorado Medical Center recruits graduate nurses, who undergo a 4-month intensive course in the theory and practice of paediatrics to enable them to take a greater part in the provision of health services in low-income areas and to aid paediatricians.

The nurses take histories, perform comprehensive physical examinations, do the relevant simple laboratory tests and make development assessments of all kinds. They give almost complete well-child care and can evaluate and manage many acute and chronic disorders. They can assess the acuteness and severity of a disease, help in emergencies, and are expert counsellors in child-rearing. The nurses work in child health stations in low-income and rural areas as part of the state health service and they also help in private paediatric practice. They give great support to mothers in the neonatal period and make many home visits. On average the nurse can cope unaided with 70 per cent of cases, referring about one case in 4 at the most to the paediatrician. In private practice, more than half the parents think that children are getting better care now from the joint attention than from a doctor alone, as was the case previously.

Each nurse trained allows the increase of a physician's potential by one third. The nurse helps bring together the public and private sectors of medicine. The main difficulty seems to be the reorientation of the nurse towards acceptance of more and different responsibility and initiative. On-the-job training will not accomplish this role transfer, and the 4-month special course is an essential part of the scheme.

3. UK: Attachment of Nursing Services in General Practice

In recent years, there has been an increasing trend in the UK towards the attachment of members of the domiciliary nursing services to general practitioners. This began in 1963 with the Gillie Sub-Committee which suggested that domiciliary nursing staff should be attached to family doctors. This suggestion was endorsed by the Royal College of Nursing and the College of General Practitioners. In 1968, the Health Services and Public Health Act removed the legal difficulties, and attachment schemes have now been introduced by many local health services.

Health visitors, district nurses or midwives may be attached to a general practitioner or group practice; sometimes to more than one practitioner or group. The district nurse or domiciliary midwife provides services to patients on doctors' lists and is able to consult regularly with the doctor or doctors concerned.

Health visitors work in similar fashion, but also may provide such services as child health, school health and health teaching to everyone in the area, not merely to the people on doctors' lists.

Some local authorities employ health visitors and nurses to work in a specified hospital department (e.g., geriatric, diabetic) to facilitate liaison and cooperation between the hospital department and health personnel responsible for domiciliary care.

The idea behind this method of providing health care to the public is that of the community health team. Such a team will provide a full range of both personal and preventive services. It has been found that attachment schemes help general practitioners to provide more comprehensive care and a better quality of care for their patients. The new trend towards health centres fits well with the trend towards group practice and the attachment scheme described above. Social workers are also now being included in these community health care teams to thelp with the non-medical problems of patients.

A report[3] published at the end of 1970, notes that where nurses make a first visit to the patient, it must be understood that this visit is not for the purpose of diagnosis. The doctor remains accountable and the attachment schemes are not an attempt to relieve the general practitioner of responsibility, but to make more effective use of both medical and nursing skills to meet the needs of the community.

It is clear that attached personnel of this type in the UK are not medical auxiliaries in the exact sense of the term as defined earlier. It is perhaps important, nevertheless, to include a brief description of this growing acceptance of intermediate technology in health care within the British National Health Service.

4. USSR: The Ordinary or General Feldsher

Their history is long. In 1700, Peter the Great started a corps of military "feldshers" (field barbers) who were trained to provide medical care to the army. These men, when they retired, often settled in rural areas which lacked doctors and practised their skill among the local people. After 1860, a system of local government was set up in place of serfdom, but the districts were mostly too poor to pay physicians to provide a medical care service and instead this function fell to the lot of the feldshers. Schools were opened in which they received some kind of training for 2 years, and by 1913 their numbers had risen to 30,000.

After the Russian Revolution, there was an attempt to upgrade the more skilled feldshers to doctor

status and to stop training at feldsher level, but despite a big increase in the number of doctors, the medical auxiliary continued to be needed. Feldshers remain very much part of both urban and rural medical care in the Soviet Union.

In urban areas, there are plenty of doctors, and feldshers function as their assistants under close supervision. It is in the rural areas that the feldsher acts as a substitute for a physician and he/she may look after up to 1 500 people. He/she is responsible for preventive medicine and health education and also looks after the sick and refers patients to the district hospital for treatment by the physician there. Close supervision of the feldsher's work in diagnosing and treating disease is an accepted part of the Soviet medical care system, although there are indications that this does not occur in the remoter areas.

Recruits for feldsher training with 8 years of general education receive 3.5 years of special training; those with 11 years of general education receive 2.5 years of training. Recruits are matched for language and cultural background to the district in which they will work, but the training programme is meant to be uniform throughout the country and is similar to the curriculum for medical students, though in less depth. In other words, it is to a great extent theoretical rather than purely practical.

Those who do really well can proceed to medical school immediately. Others can apply for physician training after 2 or 3 years of feldsher experience. Between 20 and 30 per cent of Russian medical students have previously had feldsher training.

Promotion and in-service training are important. Feldshers have high status in the rural communities and receive good pay for their services.

Increasing responsibility carries increases in salary. Feldshers are supervised by physicians rather than by more experienced feldshers, and instruction in feldsher training schools is in the hands of doctors.

It is admitted that the feldsher system gives rise to problems: resentment of the "second class doctor" in rural areas where the physician/population ratio is relatively low. Experiments are being made, and there is little doubt that if it is clearly laid down just what *job* can be done by a non-physician as well as or better than a doctor – for example, in preventive medical services, health education, screening, etc. – then there is no problem. The medical auxiliary, within a narrower scope, provides the better service.

5. S.W. Pacific Islands: the Fiji Scheme for Training Assistant Medical Officers

The idea of training auxiliaries who either assist or substitute for doctors started in the S.W. Pacific almost 100 years ago. There were no European doctors to work in the area, and the Fiji School of Medicine was established in 1878 to train local "vaccinators". The course has been lengthened gradually over the years and the recruits, who are native to the S.W. Pacific Islands, now receive 5 years' training before becoming Assistant Medical Officers (AMOs) with the Diploma of the Fiji School of Medicine. To practise in the Fiji Islands, they must then serve a further year as hospital resident doctors.

This Diploma is valid only for medical practice within the islands and in government service. AMOs have access to fully qualified physicians, also in government service, when they need to refer a patient. They work either as assistants to doctors or as completely independent practitioners, subject only to minimal supervision. They are supported by other health workers, also locally trained, such as nurses and sanitarians.

The AMO is the official representative of the Fijian Government responsible for enforcing health regulations and supplying health services in his area, and for keeping the local health records. The work is mainly curative and there is little time for health educational activities, but the AMO provides on the whole excellent care. Promotion and in-service training reward exceptional ability.

There has been no local university medical school. Recruits for AMO training come straight from the local secondary schools and the course of training is specially geared to the level of education reached before admission and to the health needs of the communities in which the AMO will be working.

6. Medical Auxiliaries in Africa

Many different types of auxiliaries are being trained and employed in Africa. In French-speaking areas, the idea is far from new. The system was meshed with French medical tradition and springs from the medical schools which the French set up in Africa. French African auxiliary tradition is being omitted from the examples to be considered here.

Ethiopia is taken on its own; likewise Nigeria. Medical auxiliaries in East Africa (apart from Ethiopia) form more of a body of similar groups because, even in a country where there is a medical school, this is still something quite new and the background to the developing health service is that of non-indigenous practitioners; doctors coming from other countries to serve for a period and making use of local people as assistants.

Once there is a local medical school, new problems arise. If its qualification is recognized internationally, how are local working conditions to be made

sufficiently attractive to keep newly qualified doctors happy at home without coercion and without bankrupting the country? In any case, their number will be pitifully small in the face of the increasing demand, and their initial enthusiasm could soon be dampened as they are faced with impossible tasks. Teamwork has been recognized as essential, as has the provision of an extensive supporting infrastructure in all governmental health services in East Africa, whether rural or whether for the less wealthy population within the cities. The shortage of doctors is more noticeable in the rural areas because distance, as well as pressure of work, takes up doctors' time, but the principle of making use of auxiliaries applies in town and country, with added emphasis on the need for good referral and supervision facilities in rural areas.

a. ETHIOPIA

The population of the country is about 25 million people and Ethiopia has had a scheme for training health auxiliaries for the last 35 years. It has had a medical school since 1964 and its first graduates were produced in 1968. There are fewer than 400 doctors working in Ethiopia and only 70 of them are Ethiopian. They are helped by just over 200 medical auxiliaries.

The literacy rate is very low among Ethiopians: only 13 per cent go to school at all, and only 4 per cent go beyond primary school level.

In 1935, regular training for health personnel was begun at the same time as the training of sanitary personnel. In 1954, the Haile Selassie I Public Health College and Training College was established at Gondar as the beginning of a real development of health manpower and basic health services. Gondar College is unique because it trains health workers of various categories together. A special category, that of Health Officer, has been created. The Health Officer leads the rural health team, aided by the community nurse and the sanitarian.

Ethiopian Health Officers are medical auxiliaries. They are recruited from among candidates with the maximum 12 years of schooling and they receive a 4-year training. The emphasis is on preventive medicine with a team approach, and training is almost equally divided between academic and practical work. It ends with a year of closely supervised practical field experience in a training health centre. The Health Officer learns preventive medicine, basic clinical medicine, health administration, health aspects of community development and methods of health education; is in charge of a health centre and is responsible for all its activities. In many of the rural areas, the Health Officer has to work with very limited supervision and the referral of patients is difficult. The responsibility can be great.

In 1962, the Gondar school was taken over by the Haile Selassie I University and the training of the Health Officer became more academic, thus tending to widen the acceptable gap between the Health Officer and the rest of the team. Health Officers were then found to be less willing to work in the more remote areas.

In 1963, plans were made for founding a medical school in Ethiopia to meet the tremendous shortage of indigenous doctors, and about 27 Health Officers were selected from among the Gondar graduates to receive a modified 5-year medical course which took into account their previous training and experience. The idea was that when these Gondar entrants graduated from the medical school they would be full physicians with previous wide experience, and thus well fitted to fill key public health positions in Ethiopia.

In Ethiopia there is also a strong cadre of "dressers", who receive a 2-year training and who occupy an important place in the country's health services. Some work in hospitals and health centres under supervision, but many work in the field and go from village to village taking care of local health needs under only intermittent supervision. They receive a simple training in clinical medicine, but there is now a much greater effort to emphasize the preventive and public health aspects and to introduce a system of in-service training, refresher courses, and a proper career structure. These auxiliaries must now have reached grade 6 of elementary education before they are accepted for training.

Now that the new medical school is producing doctors, the position of the Ethiopian Health Officers must be clarified and an attractive career structure offered. There is also a great need for more lower-grade auxiliaries to form a supporting infrastructure.

b. UGANDA

The country has a population of 8 million and has had a training scheme for medical auxiliaries for over 50 years. Since 1922, it has had a recognized medical school which has served Kenya and Tanzania as well as Uganda. The number of doctors working in the country is about 500, and there are some 400 medical auxiliaries.

Auxiliary training is based on Mbale and lasts for 3 years. Selection is from school-leavers who have passed the Senior Cambridge School Certificate; that is, who have completed their secondary school education. About 25 to 30 auxiliaries are produced each year and it is planned to increase recruitment. They receive a training which is based on nursing theory and practice with the addition of training in the recognition of clinical signs and symptoms and in the administration of

health centres and bedded dispensaries. They are taught during their first year by a senior medical auxiliary and during the second and third years by hospital medical officers and visiting specialists.

The cost of the 3-year training is rather less than £500. The cost of training a medical student at Makerere University is about £10,000. The medical auxiliary is responsible for the health of an area which is based on a health centre with sub-centres and dispensaries, and the duties are very much the same as those of the medical auxiliary in the Sudan.

c. SUDAN

The country has a population of 13 million people and has had a medical auxiliary training scheme for over 50 years. It has one of the older medical schools in Africa. There are 700 doctors working in the Sudan, helped by over 750 medical auxiliaries.

Auxiliary training is based in Omdurman and lasts for 2 years. Selection is from among male nurses with 5 to 10 years of experience. It has some geographical basis, since auxiliaries are of greater value where they are sympathetic to the local culture. The average intake is now 50 students a year. Before training as nurses, the students will have had from 4 to 6 years of primary school education. They are literate, but use Arabic, whereas medical students are trained in English.

Throughout their training, the auxiliaries remain in constant contact with patients and they work as they learn, mainly by word-of-mouth teaching. The cost of the training is between £300 and £400 and, during it, the auxiliary earns between £3 and £4 a week. It costs £1000 a year for each medical student at Khartoum University Medical School. Total cost of producing a doctor is, therefore, approximately £6000, while the total cost of producing a medical auxiliary is £750.

The auxiliaries act as local representatives of the Health Ministry; they are responsible for environmental health, immunizations, control of epidemics, registration of births and deaths and administration of the local health centres. They work with the auxiliary midwives and the health visitors and see the patients coming to the health centres. If they cannot treat a particular case, they decide where the patient should be referred to see a physician. In rural areas, the auxiliary is also responsible for the care of in-patients in local hospitals.

Supervision, either direct or remote, is part of the system and is well maintained. There is a definite career structure for the auxiliary, who is clearly distinguishable from the physician, and is in fact better accepted in rural areas.

d. TANZANIA

Tanzania has a population of 12.5 million people and has had a medical auxiliary training scheme for many years. It has a new medical school which has still to graduate its first doctors. There are 400 doctors working in Tanzania and just over 200 medical auxiliaries.

Tanzania is an example of a country in which standards for auxiliaries have been raised progressively while the previous cadres have been retained. Thus the country at the moment has some 4 levels of medical auxiliary, all of whom serve as substitutes for doctors.

The rural medical aide has had 8 years of schooling and receives a 3-year training for work at dispensaries. The medical assistant has had 10 years at school and receives similar training.

Assistant medical officers are recruited from among the ranks of medical assistants and receive 9 months' further training, which includes public health and obstetrics; these subjects are not taught to medical assistants.

Rural medical aides can be chosen for further training to become medical assistants. Medical assistants in turn get further training to become assistant medical officers, who can then take charge of health centres, whereas medical assistants do only curative work in hospitals.

The medical school will turn out licensed medical practitioners. It is not yet known whether the assistant medical officer will have the opportunity of being upgraded to becoming a licensed medical practitioner with further training.

e. KENYA

The country has a population of 10 million people and has had a medical auxiliary training scheme for 40 years. It has a new medical school which is just graduating its first doctors. There are about 800 doctors working in Kenya and about 600 medical auxiliaries.

Auxiliary training takes place at each of the main provincial centres and the course lasts 4 years. Recruitment is from school-leavers with Senior Cambridge School Certificates. The best students receive advanced training to become clinical assistants, who work in hospitals as temporary replacements for physicians.

The cost of training a medical assistant is about £1 000. Training a medical graduate is unlikely to cost less than £10,000.

Medical assistants are in charge of rural health centres as part of the Kenyan concept of integrated medicine. They are responsible for both preventive and curative medicine in their area and work as part of the health team, which receives 2 months' training together in teamwork.

The education of health care personnel in Kenya is under constant review in response to changing needs and conditions. It is planned to train about 70 medical auxiliaries each year and to recruit from those with middle-level schooling.

f. MALAWI

The country has a population of 4 million people and has had a medical auxiliary training scheme for 35 years. There is no medical school and none is planned for the near future. The number of doctors is about 80 and the medical services depend almost entirely on between 500 and 600 medical auxiliaries.

Medical auxiliary training is based on hospitals in Blantyre and Zomba and lasts for 3 years. Selection is from candidates with 6 years of basic education. The first 2 years are spent in the equivalent of nursing training; women spend their third year learning midwifery and men learn general medicine and surgery.

After their 3 years of training, the medical auxiliaries are responsible for the health of 90 per cent of the population of Malawi. Some 120 health centres and district hospitals are entirely staffed by medical auxiliaries, and supervision by the few doctors available may be infrequent or remote. The cost of training a medical auxiliary in Malawi is £1000. At present, 43 Malawians are training to become doctors in medical schools elsewhere.

g. NORTHERN NIGERIA

The population of Nigeria is about 63 million people and they are looked after by less than 2000 doctors, only about half of whom are Nigerian. In the rural areas of Northern Nigeria there is only one doctor to 150,000 people. At the moment, much of the health care is provided by health auxiliaries (e.g., community nurses and dispensary attendants) who are not medical auxiliaries. These are recruited from primary school and receive a simple training at Kano.

There are 3 Nigerian medical schools: Ibadan, Lagos and the new school at Ahamadu Bello, Zaria, which expects to graduate its first doctors in 1973.

It is hoped soon to start a scheme for training medical auxiliaries at Zaria through a new Institute of Health closely associated with the new Ahamadu Bello University medical school, but this had not materialized by March, 1971. The intention is to provide a 3-year training for recruits from secondary school and these medical auxiliaries will provide a reliable infrastructure for the new Northern Nigerian health services.

Selection of candidates for medical auxiliary training is to be from all areas of Northern Nigeria. They will be chosen mainly from students who have completed secondary school education but, where necessary, a special preliminary instruction course is to be given to make sure that all areas are represented in the scheme, even if at first deficient in educational infrastructure.

The doctors now being trained at the new medical school will lead teams of medical and health auxiliaries, and both doctors and medical auxiliaries will receive practical training together in field conditions. Principles of delegation, supervision and selection for referral will, therefore, be already accepted before either doctors or medical auxiliaries graduate.

Nigerian medical auxiliaries will undertake responsibility for immunization and vaccination programmes, community hygiene and sanitation schemes, and education in health and nutritional needs. They will also be able to deal with many minor diseases, selecting the more serious cases for referral to the physician. The medical auxiliary is to be part of the health team led by the doctor. The medical auxiliary will independently supervise the work of less highly trained health auxiliaries, who will act as assistants.

7. People's Republic of China: the Training of Peasant Doctors

The population of China is more than 700 million and more than three quarters of this number live in the vast rural areas. A high proportion of the doctors work in towns and cities. Although a great effort is being made to train large numbers of new and traditional-style physicians, their number is still inadequate.

From 1964 onwards, mobile medical teams were sent out from the cities to set up rural health services. One of their most important tasks was to train medical auxiliaries from among the local people. These are the so-called peasant doctors.

The idea is that for each of the production brigades which make up one of the 70,000 Peoples's Communes, there will be a trained peasant doctor. The peasant doctors will work with a number of sanitary workers and midwives to provide a health service for the millions of peasants who would otherwise lack any form of modern health care. The peasants are all literate, but few have had more than 5 years of school. A candidate for training as a peasant doctor is chosen by his/her production brigade because of keenness to train and intelligence, and also on evidence of qualities such as unselfishness, compassion and responsibility.

The training of peasant doctors is undertaken by the area medical team and is especially planned to occupy only the slack 4 to 5 months between agricultural seasons, since it is considered more

important than anything else that the recruits should remain peasant farmers deeply rooted in their communes.

Training takes place over 3 years in these 3 4-5 month periods and is streamlined to mix theory and practice from the beginning. The students live with the medical team and learn continuously, so that even in the brief first period of training, they learn enough to be of use when they go back to their villages. They have a rough understanding of the structure and function of the body, can diagnose and treat a few common minor diseases and know the essentials of environmental hygiene. Most important, they know how to recognize serious conditions and the danger signals indicating the need for expert help. The health care they are able to provide in their villages is supported by a telephone link and weekly visits by the medical team to support, advise and encourage them.

After the third period of training, they are qualified as peasant doctors, but in-service training continues and continuous support is provided. The peasant doctors are very much part of the community they serve and this mutual trust and confidence undoubtedly contribute a great deal to their remarkable success.

BIBLIOGRAPHY

1. Pirie, N.W. *Food Resources Conventional and Novel.* Penguin Books, London. 1969.
2. Horn, J.S. *Away with all Pests.* Hamlyn, London. 1969.
3. Joint Working Party of the Society of Medical Officers of Health, the Royal College of Nursing, The Health Visitors' Association, the Queen's Institute of District Nursing, the Royal College of Midwives, the Association of Supervisors of Midwives and the Royal College of General Practitioners. *Attachment of Nursing Services in General Practice.* Educare, Hemel Hempstead, UK 1970.

CHAPTER IV

THE UNDER-FIVES' CLINIC

by Dr David Morley

The following article appeared as Chapter 19 of Dr Morley's book "Paediatric Priorities in the Developing World"[1] and is an extension of the chapter written on Under-Fives' Clinics in Dr Maurice King's book "Medical Care in Developing Countries".[2] It was reproduced in CONTACT 18, December 1973.

INTRODUCTION

The cost of medical care given through the clinic or outpatient department is only a fraction of that for inpatient care. Trials in many countries have shown that items of care such as operation for the repair of a hernia, or care of most tuberculosis, including tuberculosis of the bone, can be effectively carried out with equal success in the outpatient clinic as by admission to hospital. This is a field in which further investigation is urgently needed. With perhaps $1 per head to spend on health in developing countries in 1970 and $3 by the year 2000, the proportion of money usefully spent and the emphasis placed by doctors on outpatient care is likely to increase in these 30 years.

The clinic as described here attempts to offer comprehensive care for all children under the age of five. As will become clear, it is different from a traditional outpatient clinic, which it replaces. Adult outpatient clinics in developing countries were designed to separate out the more severe conditions for specific therapy and to offer symptomatic relief for the rest. So, often, clinics for children have been developed along similar lines. Because the Under-Fives' Clinic attempts to offer curative and preventive services, the mother will receive teaching at a number of stages as she passes through the Clinic. Her child will be weighed and the weight charted, and any immunizations that are due will be given. The child will also receive curative and symptomatic treatment for the symptoms his mother presents, and this treatment is her felt need. She is unlikely in the first few years of attendance to understand the need for prevention. The Under-Fives' Clinic will be a major part of the maternal and child health work undertaken by the hospital, health centre or sub-centre where it is held. If possible, it should be run in conjunction with an antenatal clinic and family planning services, all of which need to be available to the mother at every visit. The antenatal clinics for mothers without young children will usually only take place once or twice a week, but the Under-Fives' Clinic facilities should be available at any time for children, and able to care for pregnant mothers as well as their children.

The family planning clinic described below is now open at the end of every morning. The mothers know that they are welcome to attend this clinic after attending the Under-Fives' Clinic. For them, this has a considerable advantage as they can obtain family planning advice inconspicuously, without making a special visit. In a community where everyone's movements are usually known, this visit need not necessarily become a matter of general gossip.

The Under-Fives' Clinic completely replaces both the welfare clinic and the outpatient clinic for all children under 5 years of age every day of the week. As long as children under 5 years of age are still seen in a separate outpatient service, an Under-Fives' Clinic does not exist.

THE OBJECTIVES OF THE UNDER-FIVES' CLINIC

The Under-Fives' Clinic aims to extend low-cost curative and preventive care to as large a proportion of the population as possible. The basic services it offers will be the same whether it is situated in a remote village or in a hospital complex in a major city. The clinic described was developed over several years to meet the paediatric challenge presented by the young children of the Ilesha area of the Western Region of Nigeria. This challenge is inherent in a birth rate of over 40 per 1,000 that is common to

1. Morley, David. *Paediatric Priorities in the Developing World.* Institute of Child Health, University of London. Butterworths & Co., UK. 1973.
2. King, Maurice H. (ed.) *Medical Care in the Developing Countries.* Oxford University Press, Nairobi. 1966.

the whole of this region, and a childhood mortality of 30-40 per cent, which means that in the past, no less than a quarter to one-third of all the children born there died before they were five. The experience from Imesi is compared with other areas in Table 51.

TABLE 51

Major Causes of Death in the Under-Fives (Percentage)

	Imesi Nigeria (1957)	Luapula Zambia	North Sumatra	Pusan South Korea
Diarrhoeal diseases	12	18	25	15
Pneumonia	12	10	11	9
Malnutrition	12	16	26	14
Malaria	8	15	8	3
Whooping cough	8		2	4
Measles	8	13	7	16
Tuberculosis	5		6	8
Smallpox	5			
Anaemia		7	5	
Other, mostly neonatal	30	21	10	24
Total number of children	–	340	1,282	1,036

Note: All the conditions in italics can be prevented in an Under-Fives' Clinic. Health education and early diagnosis and treatment can reduce mortality from the others

Reproduced from Shattock, 1971

The Ilesha hospital, where this clinic evolved, serves a town of 100,000 people in Nigeria. This meant that had none of them died, there would have been no less than 20,000 children under 5 in the town, a figure that death did in practice reduce to the hardly more manageable number of about 17,000; still a formidable task for one small hospital. Though the main clinic is in Ilesha itself, it was developed from the findings of an intensive study of child health carried out in the nearby "research village" of Imesi. The figures for Imesi (Table 51) confirm the importance of diarrhoea, pneumonia and malnutrition. Table 52 shows that the starting of an Under-Fives' Clinic there coincided with the reduction of all deaths in the first 5 years of life to about one-quarter of their previous number. An independent study showed a striking difference between Imesi and a neighbouring village. Curative services alone can cut such gross under-five mortality by half, among them being sulphadimidine or penicillin for bronchopneumonia, and chloramphenicol for early whooping cough, but its further reduction to one-quarter will only follow the introduction of preventive paediatrics. This is the whole purpose of an Under-Fives' Clinic, and the enormous number of lives it saves is the entire justification for what follows.

TABLE 52

Child Mortality, Imesi Village, Western State, Nigeria
(Population 1963-1964 = 5,476)

	Prior to 1957	1962-1965	1966	UK 1966
Stillbirths/1,000 total births	41	36.4	21.7	15.3
Neonatal deaths/1,000 live births	78	21.9	22.2	12.9
Infant mortality/1,000 live births	295	72.0	48.1	19.0
1-4 mortality/1,000 alive at that age	69	28.1	18.9	0.84
Population (natural) increase/year %		3.5	2.9	

ESSENTIAL ACTIVITIES AND AIMS

The essential activities of an Under-Fives' Clinic rest on the 4 corner-stones of Treatment, Immunization, Weighing, and Health Education. Of these, weighing is exceptional to the others, as the weight curve that results acts as an evaluation of the other 3 activities. The aims of those who run Under-Fives' Clinics may be summarized as follows:

1. The supervision of the health of all children up to the age of five.
2. The prevention of malnutrition, malaria, measles, pertussis, tuberculosis, smallpox, poliomyelitis, diphtheria and tetanus.
3. The provision of simple treatment for diarrhoea, with or without dehydration, pneumonia and the common skin conditions.

"Reproducibility"

At one time it was suggested that these clinics were suited only to the conditons of church-related hospitals, and not for general use, for only there, it is said, is found the combination of staff continuity and high motivation that is required for success. While it is true that the idea and practice of Under-Fives' Clinics has spread quickly to other church-related hospitals in 4 continents over the last 6 years, the author has always believed that they were suitable for more general use, and it has been reported that large numbers of these clinics have now been started by many governments, particularly in Malawi, Sarawak, Sierra Leone, Zambia and elsewhere. Here the locally trained nurses and medical assistants have taken up this work with its clearly defined objectives with a new zest and enthusiasm. Given guidance, leadership and supervision, these clinics can be started in any developing country that may benefit from them. Thus, there are signs that they are spreading, and so making it possible for the lives saved over the last 14 years at the original clinic in Ilesha to be saved in other countries too.

THE BUILDING

The staff of an Under-Fives' Clinic will have to spend long and exhausting hours in the building available. The doctor in charge must be concerned with the details of the building if the staff are to function efficiently. While these remarks are true of the whole health centre, they are particularly important in the wing of the building used for the Under-Fives' Clinic, as this is likely to be the most crowded area. As around 60 per cent of those attending the health centre will be children under 5, an area needs to be set aside for this group for use every day. In this description of Under-Fives' Clinics, no mention is made of facilities such as a laboratory or room for dressings, as these facilities will be shared with the rest of the health centre.

An architect defined the purpose of a building as a structure to protect those who live or work in it from the weather. In most tropical countries, this implies protection from the heat of the sun. Some of the important ways by which a room may be kept cool and dry and "friendly" are so often ignored that doctors need to be familiar with them.

1. Light means heat, therefore windows should be small, and wooden louvres may be preferable to glass. The roof should be overhung with large projecting eaves. Where possible, the length of the building should be across the direction of the prevailing winds. A knowledge of the direction of storms may suggest modifications which will keep out the worst of the wind and rain.

2. When the sun hits the roof, the air under the roof is warmed, thus there should be ample allowance along the sides of the building for circulation of air between the ceiling and the roof, with vents at the gable end. A layer of silver paper on the upper surface of the ceiling will reflect back infra-red rays.

3. The outpatient clinic will contain many people generating heat. This must be allowed to escape upwards and, clearly, the height of the room is important. There is also need for vents (at least one foot square) in the walls near the ceiling to allow the hot air to escape. In some hot countries a "Dutch barn" type of structure, with few if any walls and only screens, has been successfully used.

4. If there is any choice of building material, the heavier material such as mud or mud brick is a better insulator than the concrete block.

5. The health centre or outpatient building will be the first and most frequent contact that the local people have with medical services. They are more likely to feel at home if it is constructed along the same pattern as their own houses. This will vary from area to area, but the mud-wattle-dieldren-and-whitewash building recommended for some areas of East Africa is a good example. This can be a highly durable structure, and yet it can be extended or altered by local labour who are expert in such building methods. Outpatient waiting space is often inadequate. A simple construction is suggested and has been designed so that the use of the rooms may easily be altered (Figure 106).

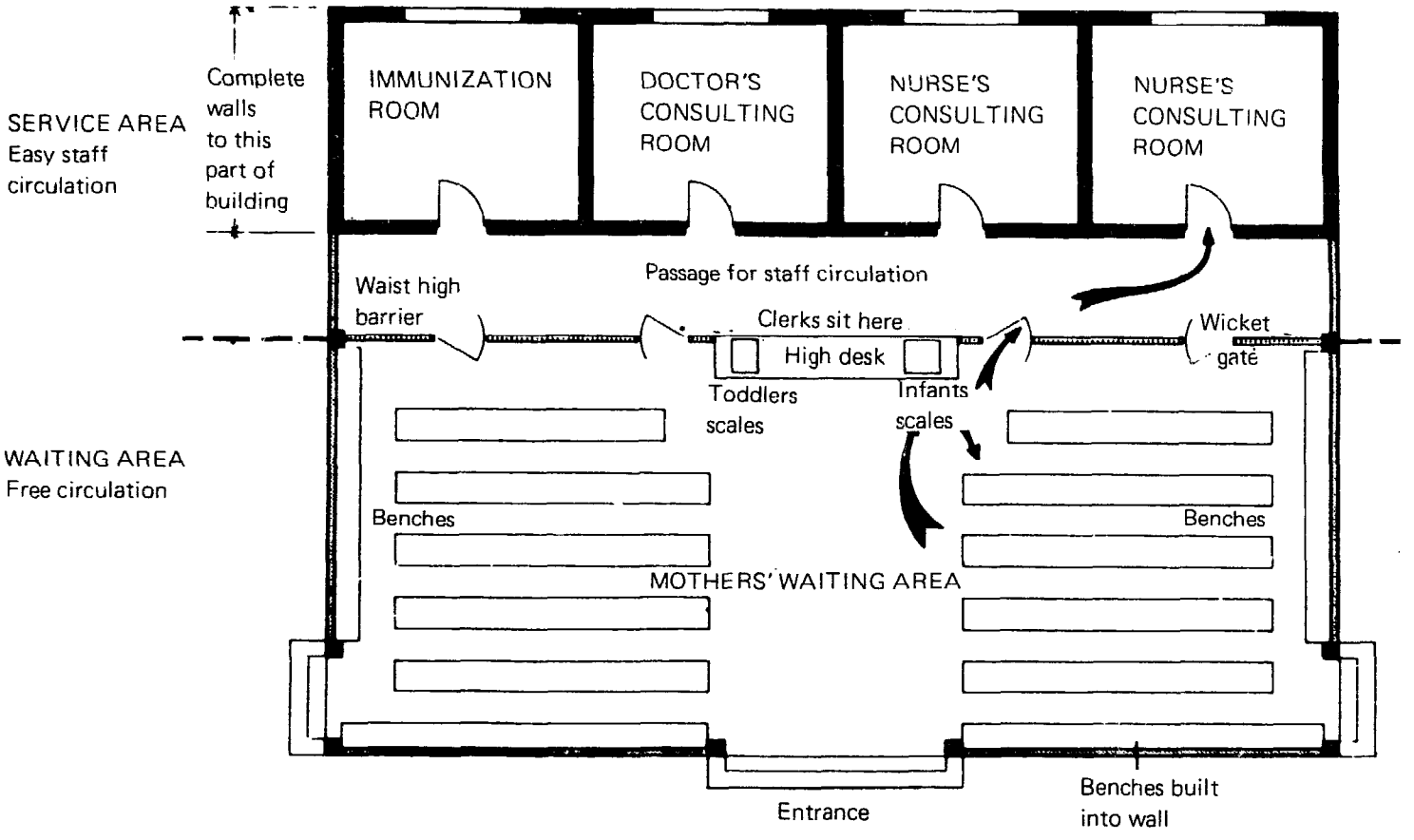
COMFORT OF THE MOTHERS AND STAFF

In the waiting space and in the rooms where the mothers are being seen, the seats should not be higher than 14 inches (35 cm). The mother with a child on her lap is uncomfortable on a chair of standard height; she tends to sit with her heels off the ground and her legs become painful.

An easily visible and accessible tap, so that she may get a drink for herself or her possibly feverish child,

Figure 106

Plan of an Under-Fives' Clinic
(Half the floor space is taken up by the waiting area. A waist-high wall separates this from the service area.)



is essential. Not only is adequate and clean latrine accommodation essential, but a modified unit may be necessary which can be used without fear by the children.

One feature that is particularly valuable is a low wall separating the area of staff activities and circulation from the waiting space. In this are placed small gates. The waiting mother should not feel too far from the place where she will be seen, but the staff will not be surrounded by a crowd as they work. The registration desk will be in this low wall. The clerk carrying out the registration is seated on a high stool behind the registration desk, which is 40-50 inches (100-120 cm) high, so that his eye level is the same as that of the mother. This level is important. The mother who will be standing to register with a clerk sitting at a table at a normal height may not see more than the top of his head, unless he looks up. The clerk sitting on a high stool has his eyes on the same level as the mother, and as she comes forward he smiles and greets her in the manner traditional to their society. Such a first reception at the clinic is invaluable. The mother who may be so anxious about her child finds with relief that she is welcomed, and the staff want to help her.

The weighing station may also be set in the low wall. Either a beam balance scale with weights moving along an arm or a modern spring suspension scale* on which the child can be suspended in special trousers or in a bowl is the best. If trousers are used, several pairs will be required, so that mothers can put their children into them while another child is being weighed. If the space for the scale is situated in a "well", the child when perched on the scale is less likely to be frightened, as he is at the same level as the working surface on either side. For older children, an adult scale with a toddler bar is required. This latter scale may also be used for antenatal and adult weighing.

The system in which the mothers form a sitting queue on the benches and slowly shuffle their way along is only slightly more satisfactory than a standing queue. While waiting, they should have an opportunity to attend a discussion with the health teacher or just to socialize. This will be possible if they deposit their green clinic cards in a pile knowing they will be seen in this order. It is better to have a "queue of cards" than a queue of mothers. The mother may also appreciate high and clearly visible shelves on which to deposit belongings, and if

*Salter Scale No. 235, 25 kg x 100 g, with special (King) dial face, including four pairs of strong plastic trousers, cost approximately £9, and is available from CMS Weighing Equipment Ltd., 18 Camden High Street, London NW1 0JH

these are visible to themselves and their friends, the risk of thefts is reduced. If possible, the mothers should be called into the consultation room in groups of 10; there, while they wait to be seen, they should "learn by overhearing".

In more than one rural area, doctors have reported that the level of attendance was improved when specific days in the week or month were set aside for different villages or areas, and on those days as complete attendance as possible was attempted. This is similar to the system now used in some European schools where children from one village work together to increase a sense of community.

RECORDS

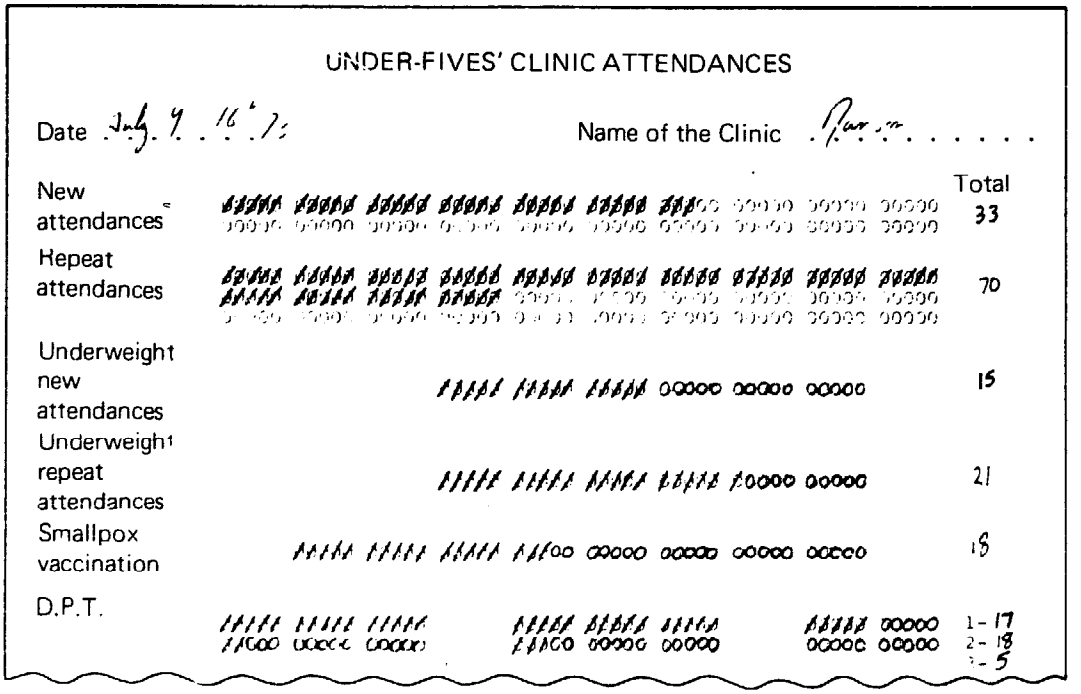
There are few hospitals in developing countries that keep adequate record filing systems for their outpatients. Maintaining a file of more than 5000 records, where the identification of people by name is not clear-cut, can be difficult and expensive both in personnel and waiting time for the children. Experience from many countries emphasizes that the mother will care for her child's own records once she has learned of their importance. These records must not resemble a "bus ticket", designed to take the child through one disease incident only, but should record his growth (on a weight chart), his major illnesses, his immunization state and any "reasons for special care". Each record card should be supplied in a strong polythene envelope 10 cm longer than the card together with a clinic card on which the staff can write details of minor illnesses and their management. Such records are becoming more widely used in many rural areas where there is a planned service, and these records are likely to replace other types of hospital outpatient records in many areas in the next decade. A staff of clerks is essential, although they will not be needed for filing records. They will complete the record cards, weigh the children and call groups of mothers to the nurses. Cards neatly made out with clear weight curves will be their responsibility. In all developing countries, there are many unemployed young men with primary education. As clerks in the Under-Fives' Clinic they may be brought into the health service and, from experience gained there, go on to training in other fields. Successful recruiting *now* and training of intelligent and well-motivated young men is essential if medical services are to expand in rural areas. In some societies, girls or married women clerks may be used. The latter have the advantage that, as married women, they are more acceptable for discussions with the mothers on controlling the birth interval.

The "road-to-health chart" is an integral part of the Under-Fives' Clinic. The objective in using these cards is to promote adequate growth rather than to prevent malnutrition. The author is familiar with the "family record" folder, and all the advantages proposed for such a system, but in his experience, the logistics of the service prevent such records being adopted outside certain demonstration or teaching areas. In no country has their use spread widely to the majority of centres.

Records other than the road-to-health chart should be kept to a minimum. Unfortunately, many

Figure 109

Part of the Under-Fives' Clinic Attendance Form
(A tally system is used)
(After Shattock, 1971)



governments still demand detailed returns which serve no useful purpose, and are often difficult to maintain with the limited facilities available; they also absorb staff time that could be more effectively used. In many countries the phrase "medical records" brings to mind "visions of inky-fingered clerks covering, in an infinitely laboured hand, page after page of a dog-eared ledger; of outpatient forms so grubby, porous and ephemeral that they almost melt in the hand". Two types of record exist: the patient's own record, such as the road-to-health chart, with its accompanying clinic card, which is "home-based", and the files and ledgers which record the work of the clinic or hospital, both for its own use and for the state. These "hospital-based" records also need to be simplified.

Hospital-based Records

The hospital records system needs to record the patients, old and new, seen each day. This can be done by a simple tally system (Figure 109) as developed in Zambia. If for legal purposes, a record of the patient's attendance is needed, then only the patient's number will be recorded. If a numbering system encoding the date of birth of the child is used, the records of attendance may be used to identify the distribution within age groups of the children attending.

As well as recording the old and the new patients in the Under-Fives' Clinic, the children attending Zambian clinics whose weight falls on or above the lower line on the road-to-health chart are also recorded. These, when expressed as a percentage of all attendances, make an excellent monitor of the changing nutritional status of the children between seasons of the year and from year to year in each area of the country. This is an example of vital information needed in planning health services, which is sadly lacking in many developing countries.

The immunizations undertaken are also recorded by a tally system. A further useful record now being included in the Zambian system is a notification of each child completing their immunization programme. Such a child is called the "protected child". If this latter figure is expressed as a percentage of new attendances, the success of the service in maintaining contact with the children providing a full immunization can be gauged.

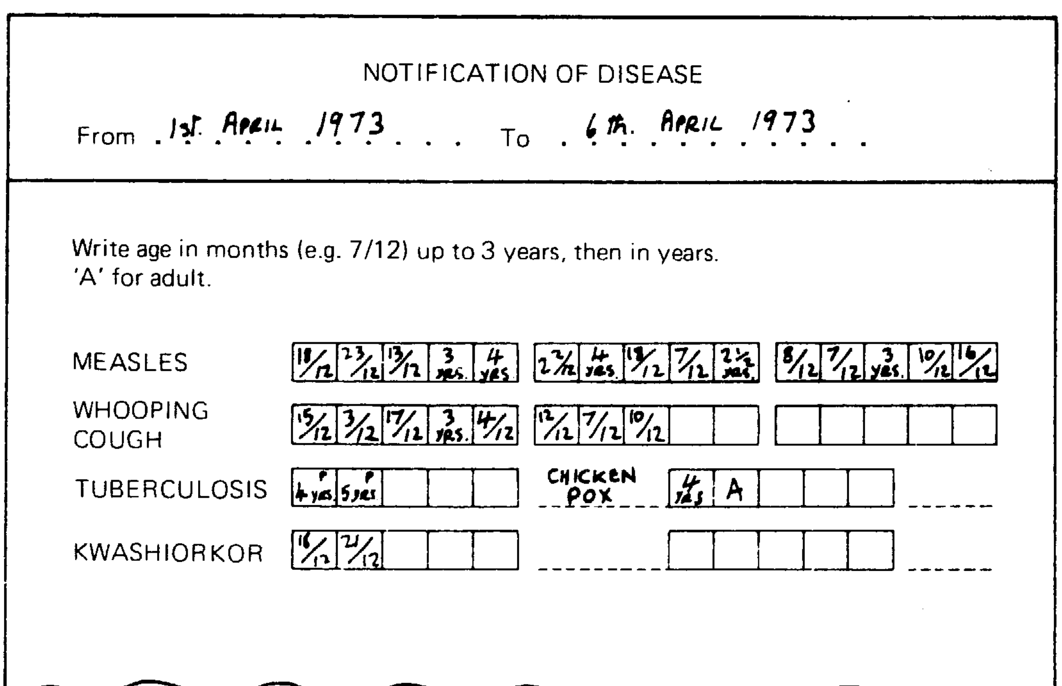
The majority of infectious diseases of children brought in contact with the medical services will be seen at the Under-Fives' Clinic, and a simple record of these is needed. Records of the individual child's name and address will not be required (exceptions are perhaps only smallpox and rabies), and any system of individual notification as used in some industrialized countries is unnecessary and wastes the valuable time of the clinic staff. A tally system may also be used for these records, although a slightly more involved system, such as that shown in Figure 110, will give the age incidence of the children. From this information, a breakdown of the age incidence of infectious and other diseases in each area by week can be made. This is necessary information if the planning of immunization programmes is to be efficient and effective.

Whatever system of records is used, the time

Figure 110

A Notification of Disease Form, Giving the Age Incidence of the Children

(A fresh form is started each week.)


NOTIFICATION OF DISEASE

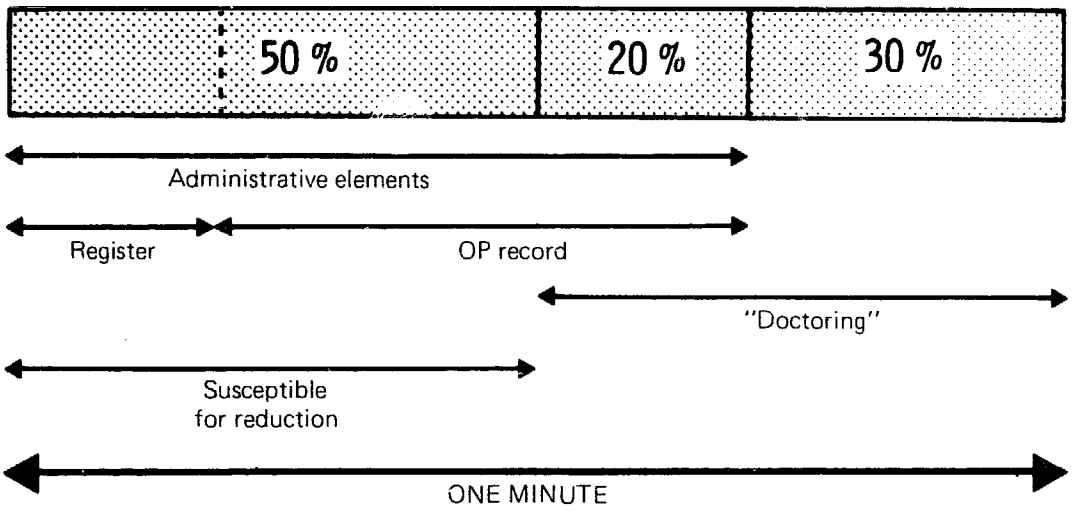
From 1st April 1973 To 6th April 1973

Write age in months (e.g. 7/12) up to 3 years, then in years.
'A' for adult.

MEASLES	11/12	23/12	13/12	3 yrs.	4 yrs	2 2/12	4 yrs.	19/12	7/12	2½ yrs.	8/12	7/12	3 yrs.	10/12	16/12
WHOOPING COUGH	15/12	3/12	17/12	3 yrs.	4/12	12/12	7/12	10/12							
TUBERCULOSIS	4 yrs P	5 yrs P				CHICKEN POX	4 yrs	A							
KWASHIORKOR	16/12	21/12													

Figure 111

Breakdown of Each Minute in Medical Assistant's Working Time
(Dissevelt & Vogel (1970) by courtesy of East Africa Literature Bureau, Nairobi, Kenya)



involved in their preparation needs careful study. One study of a medical assistant's working time gave the following breakdown for each working minute (Figure 111). Of all working time, that spent in listening and talking to the patient is likely to be the most valuable.

USE OF PERSONNEL FOR CONSULTATION

A doctor involved in clinical work will spend more time in consultations than in anything else. Ways must be found to reduce this by delegating the diagnosis and standardized treatment of common conditions to less skilled personnel. The step described below is the most urgent and important change in the method of delivery of health care if our objective is to serve the whole community and not just those who come to hospitals asking for help.

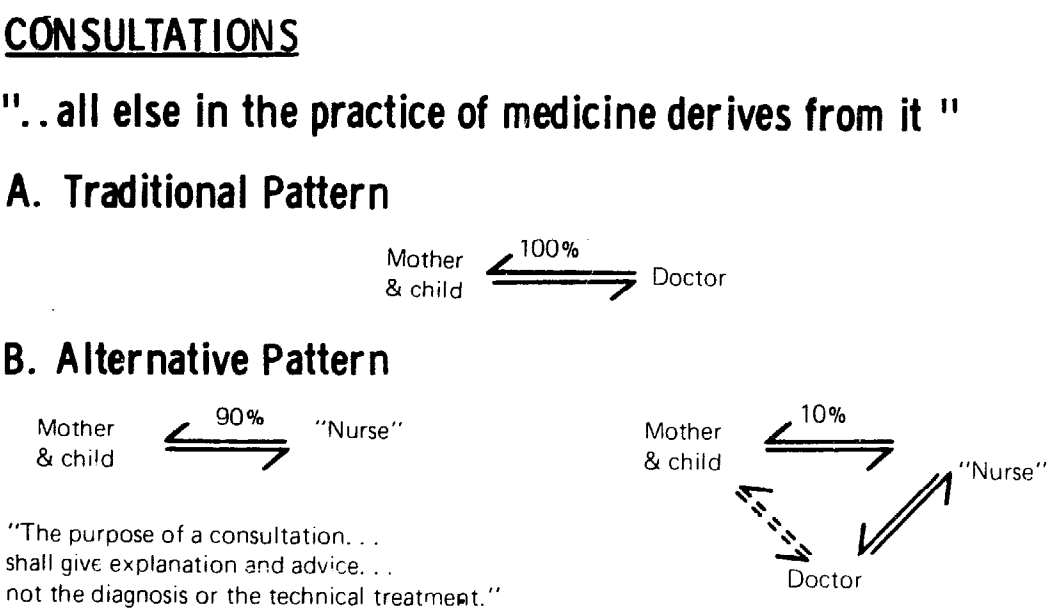
The traditional European outpatient clinic is a referral clinic and not the primary medical contact. In most developing countries, the hospital outpatient clinic is the first contact with the medical services for the majority of patients. The doctor must devise a system by which time can be kept for the following necessities.

1. Giving detailed care to 10-20 per cent of the children attending. This will include the more complex conditions and the more seriously ill children.

2. Spending time in training and encouragement as a doctor ("doctor" = "teacher") to the nurses or medical assistants and to all levels of staff with

Figure 112

Consultation. The Role of the Nurse or Medical Assistant and the Doctor.



different qualifications and degrees of training who will care for the majority (in practice 90 per cent) of those attending the Under-Fives' Clinic.

This pattern of care is brought out in Figure 112; the quotations are taken from Spence's writing.

Nine out of 10 consultations are between the mother and the "nurses" or medical assistants. These are 5-10 locally trained women who ideally will themselves be mothers. They should have 5 minutes available to spend on each child. They personally accompany all ill children to the doctor.

During the consultations in which the doctor is involved, together with the nurse or medical assistant, he or she is making double use of the available time by teaching and raising the standard of care offered by the nurse. If it is seen that the nurse supervises the treatment prescribed, it will increase the respect given by the mother to the nurse. The nurses are not acting just as a filter allowing certain patients through. The doctor is working with and through the "nurses" and guiding them in the continuing care of the children who will visit them regularly. This daily contact between the doctor and the auxiliary worker will lead to a high standard of work. The doctor is here fulfilling a role as manager and effectively delegating to those with less training.

A doctor who has additional training in paediatrics is likely to have the responsibility for children from a population of 100,000 in which there will be 17,000 children under five. It is impossible to attempt to know individually all the children and their mothers. This will be essential with only 2 groups: those needing hospital admission, and the children of the hospital staff. The latter must receive special attention, as their robust health will be such a valuable example in educating the local people. In a town in West Africa, it was known by the people that no child belonging to the staff of the hospital had died over a period of 5 years. The doctor may ask staff to look out for another group such as the children of the indigenous practitioners. Caring for the children of these indigenous practitioners, who can be so powerful in the community, may be the step through which the doctor can gain a rapport and friendship with these traditional health workers whose cooperation can be so helpful.

Mother-Nurse Relationship

To the mothers of sick children, the locally trained nurses from their own locality inevitably become the most important people they meet at the hospital. The great importance of the nurse is the critical factor in the whole psychology of the clinic and is something that the doctor does everything possible to promote. Spence held that consultation (Figure 112) is the quintessence of the medical art, and in the Under-Fives' Clinic this is certainly true, except that here it is consultation not between mother and doctor, but between mother and nurse. Spence maintained that the true purpose of consultation is to give explanation and advice, and that diagnosis is usually but a means to achieve this and must never become an end in itself. Such explanation and advice leads to the right action by the mother in matters concerning the health of her child; this action is much more likely to follow careful and sympathetic explanation than an ill-understood and peremptory command. Coming from the same culture as the patient, a well-instructed and supervised nurse is the best person to explain and offer sympathetic advice to the mother. Cultural proximity to the mother will make discussion of birth interval particularly meaningful if the nurse is well trained and also has a family.

The mother-nurse relationship is so crucial that it must be strengthened wherever possible. Thus, every time a mother comes to the clinic it should be to see the same nurse, and each time she consults a doctor this nurse *must be present,* the doctor ensuring that in all actions and words, the nurse is always supported in the eyes of the patient. This is difficult for the doctor who has not been trained in the team approach and sees him-/herself as the clinician in a "one-to-one doctor-patient" relationship, and not as a teacher, manager and leader, working with a team of auxiliaries. The flow of communication in the triangle (Figure 112) needs careful consideration. Where possible, the doctor must gain much of the needed information from the nurse, and use her to verify that the mother has understood instructions. The success of the Under-Fives' Clinic depends heavily on a high level of "one-to-one nurse-patient" relationships. Unfortunately, this delegation is a recognized or unrecognized "threat" to the doctor and the success of the clinic may largely depend on coming to terms with his/her own attitudes.

From experience, the most likely cause of failure in these clinics is because the doctor does not have the nurse present and does not fulfill the obligation to teach and support her. If the child has to come into hospital, he should return to this same nurse on his follow-up visits. This vital continuity is maintained in practice if the child's card bears upon it the number of the table where sits the nurse assigned to that family, or if these tables are distinguished by some special colour. Such a system allows the nurse time to offer preventive care through discussion of the child's diet with the mother, and she can at the same time ensure that the required immunizations are undertaken and discuss the birth interval. The doctor will supervise this work by personally checking that inoculations have been given, discussion on birth interval has been undertaken and by personally enquiring from some of the mothers how they feed their children.

The greatest economy can be achieved in employing staff to the utmost of their skill and ability. It is clearly wasteful to employ a nurse for weighing children when, in a week or two, a clerk can be trained to do this just as well, or a doctor to see the common conditions when these may be more adequately taken care of by a nurse specifically trained in their diagnosis and management, who is also trained to undertake preventive care.

Those responsible for the organization of the Under-Fives' Clinic need to work out a consultation plan to be carefully followed by the auxiliary nurse as she sees the child. A possible step-by-step method is set out here and is designed to be as simple as possible (Figure 113). The nurse must be encouraged to spend as much time as possible in discussing and, particularly, listening to the mother.

Figure 113

A Suggested Sequence for Consultation Procedure in the Under-Fives' Clinic.

Mother arrives

↓

Nurse greets mother as she sits down

↓

Nurse checks correct name on the weight chart and uses this name (unless it is culturally unacceptable)

↓

Nurse enquires about the child's health, or if he is obviously well she congratulates his mother on her child's health.
Symptoms and their duration are recorded

↓

Opens chart and quickly notes:

(1) Reasons for special care
(2) Present weight in relation to previous weight
(3) Gains a picture of child's progress and past illnesses
(4) Notes parents' attitude to birth interval
(5) Sees if any immunizations have not been given, and whether they are due

Asks about food given the previous day, and frequency of meals.
Praises mother on at least one point in the diet she has given before suggesting even minor alterations

With symptoms

↓

Nurse observes and examines relevant part of child. If the condition is:

Severe or not understood

↓

Accompanies child to see doctor (or other senior health worker)

Mild

↓

Nurse gives treatment.
Antimalarial tablets.
Arranges or gives immunization.
Food supplement if required.
Family planning advice if required

Symptom-free

↓

Nurse enquires as to happiness of the child, and his development. Follows up any lead given in conversation by the mother on family or other difficulties

Turns conversation to improving health. May draw other waiting mothers into this conversation, and, for example, get their opinion on the most suitable birth interval. Aims to be a sympathetic and patient listener.

Makes entries on card

↓

Mother and child leave

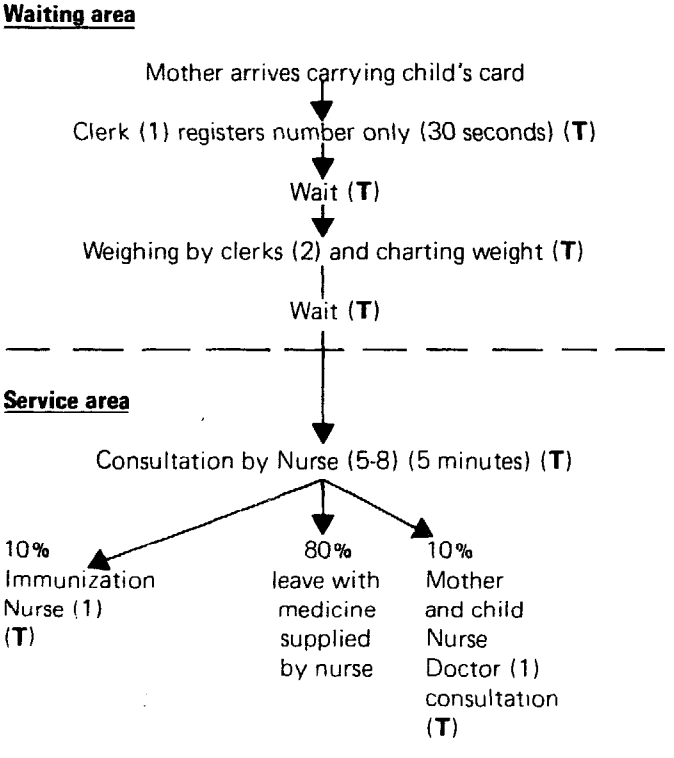
This plan of the consultation, when agreed upon, will be set out in the nurses' manual and will be a central core of the training programme. For example, as part of their training, a child's symptoms and signs and his road-to-health chart are given to a group of student nurses, so that they may discuss what action they would take, and bring their decision to the tutor for further discussion.

Lines of Flow

The happiness and good temper of those who work in the clinic, and of the mothers, will depend on the thought and careful observation given to the lines of flow. A mother with a sick child should not have to force her way through a crowded door; passageways used for staff circulation must be left clear. Figure 114 should be examined in relation to the suggested waiting and service area in the clinic lay-out shown in Figure 106.

Figure 114

Lines of Flow in an Under-Fives' Clinic Averaging 300-500 Visits Per Day.
(The figures in brackets relate to the number of personnel undertaking each function.)

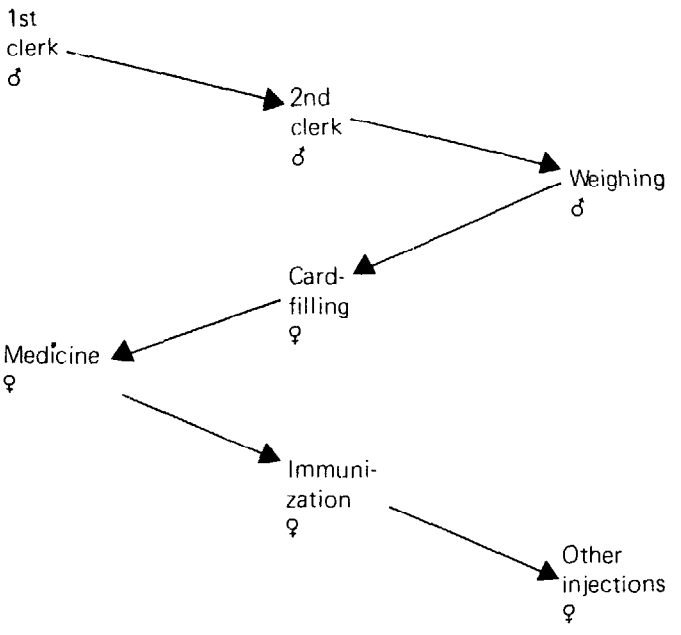


(T) Teaching introduced whenever the opportunity arises

An example of what may happen if thought is not given to planning is shown by the line of flow that existed over several years in one clinic (Figure 115). Here the mother was making brief contact with 7 people and the average consultation time was 50 seconds; no wonder such a contact with scientific medicine bewildered her. The same clinic was

Figure 115

Badly Planned Line of Flow in an Under-Fives' Clinic



differently organized (Figure 116) and subsequently a good rapport was achieved.

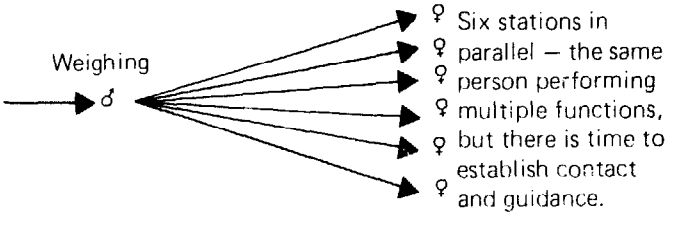
The large Under-Fives' Clinic is run with the activity sequence shown in Figure 114 with a daily attendance growing from 400 to 500 per day over 10 years. In this the immediate contact with a clerk on arrival is brief, but the mother knows her presence has been recorded. Her child is then weighed by one of 2 clerks and has a consultation with one of 6 nurses, who will always attend her on subsequent visits. From there she may go for immunization, leave with her medicines, or accompany her nurse with other referred mothers to see the doctor.

HEALTH TEACHING IN THE UNDER-FIVES' CLINIC

Health teaching is an important function of all members of staff and must permeate all activities of the clinic. Specific talks with cooking demonstrations are best carried out informally in the waiting space. The mothers should be involved in the food preparation and feed their children with any food

Figure 116

The Same Under-Fives' Clinic as Shown in Figure 115 With a Reorganized Line of Flow.



prepared at the demonstration. Teaching may be effective during the consultation; here not only the mother but also 8 or 10 other mothers waiting to be seen are involved. These mothers are "learning by overhearing". The teaching is built on the mother's existing knowledge. A discussion with several mothers in which they unfold the course or natural history of the common diseases of childhood will be popular. The role of the nurse will be to guide this discussion and particularly to offer advice on the management of the condition at home, and to emphasize those symptoms that suggest the need for a visit to the Under-Fives' Clinic.

Immunization is often a neglected opportunity for teaching. Here as elsewhere, the mother must be involved, and the nurse will build on her present knowledge of the disease being discussed. A blown-up picture of a child with smallpox, or a nurse, who with practice can give a good imitation of a child with whooping cough, may start what should be a "discussion" rather than a "lecture".

Of the 300 children with malnutrition in the population of 100,000 already mentioned, a few will require hospital treatment. The majority are better and more economically treated in nutrition rehabilitation centres, and in some areas these centres are becoming integrated with the Under-Fives' Clinics. They may be day care, or residential, depending on the distance from the mother's home.

In the nutrition rehabilitation centre, emphasis is placed on the mother rather than the child. The mother is involved in the production and preparation of suitable foods. The "stethoscope and syringe" are not in evidence. The teaching is largely undertaken by mothers whose children have recovered from malnutrition, who are guided by staff with a knowledge of nutrition and teaching methods. If possible, mothers who are leaders in the community are encouraged to stay and join in the activities of the centre.

The Formal Teaching Period

Although special emphasis has been placed on the informal teaching by all the staff of the clinic, a more formal period in which teaching and group discussion take place is still needed. The rota of instruction in an Under-Fives' Clinic in South India is given as an example (Table 53).

The Weekly Staff Discussion

A weekly meeting of all members of staff involved in running the outpatient department may do much to achieve efficiency and economy. The value of such discussion groups, both in improving morale and in implementing new ideas in an ever-changing situation, is now well recognized in the UK. At this meeting, discussion should take place on the following points:

TABLE 53

Under-Fives' Clinic — Teaching Rota (South India)

Monday	Child health and weight cards. The importance and use of the cards.			By staff nurse
Tuesday	a) Immunization b) Scabies and skin sepsis		Alternate weeks	By public health nurse
Wednesday	a) Diarrhoea b) Sore eyes	Prevention and home management	According to season	By staff nurse
Thursday	Feeding infants and children			By nutritionist
Friday	a) Family planning and child health b) Intestinal parasites and hygiene	Alternate weeks		By public health tutor
Saturday	Prevention of protein-energy malnutrition			By nutritionist

When teaching remember the following points.

(1) Be Brief — 5 to 10 minutes is enough in a busy clinic.
(2) Be Simple — make one or two points clearly, do not confuse with too much information.
(3) Be Seen — use visual aids and actual foods when possible.
(4) Be Heard — speak really loudly and capture their interest and attention.
(5) Be Remembered — where possible emphasize your teaching with one of the well-known proverbs we have chosen.
(6) Call the doctor just before you begin; he is interested to hear and support your teaching.

Reproduced from Cutting, 1971

1. Reducing the waiting time for mothers. A line of flow diagram is valuable in seeing how mothers pass through the outpatient department and in discovering how the mother's contact with different members of the staff can be made more effective, even if it has to be brief.

2. Ensuring that urgent treatment is given to the seriously ill child. All staff, including the cleaners or sweepers, are encouraged to identify such children, and when they bring a child to the doctor and urgent treatment is instituted they are congratulated on playing an important part in saving the child's life.

3. Uncovering points of friction between members of the staff and bringing these out for discussion.

4. Educating all members of the staff on matters such as nutrition and the natural history of common diseases, and discovering ways in which every activity can have an educational content. When off duty and away from the hospital, all members of the staff, from the cleaner or sweeper upwards, will be asked for advice on medical problems, and for this reason, even the most junior should receive this type of education.

Training Personnel in the Under-Fives' Clinic

Make this a major concern of the doctor and be prepared to give up time to plan it. Some of the teaching will be by discussion, as in the weekly staff meetings, some by reading and short courses, and rather more when the doctor is seeing referred cases brought by the nurse.

The more experienced nurses or medical assistants will also take a part in this training of new staff. The arrangement of the furniture, developed in Sierra Leone, was found to make this teaching and supervision possible (Figure 117). The senior nurse shares her medicines and tablets with the junior nurse, and can keep an eye on the children she is seeing and tactfully intervene if necessary.

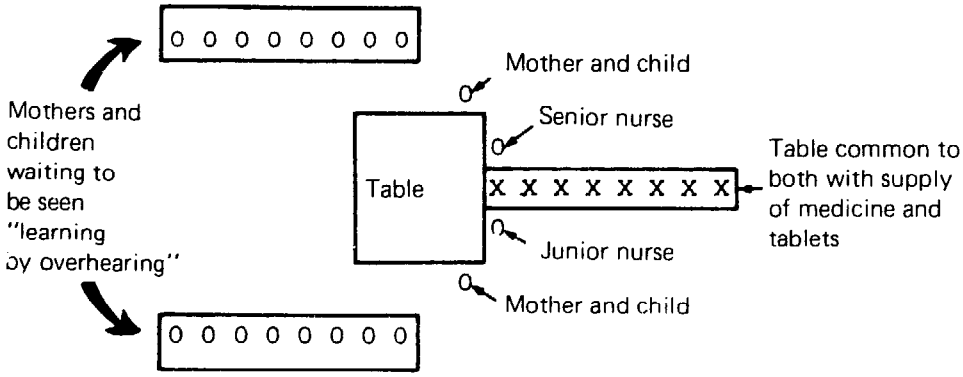
REDEPLOYING MONEY SPENT ON PHARMACEUTICAL PREPARATIONS

As the clinic becomes more "preventive" in its outlook, a greater proportion of the money spent on drugs will need to be spent on vaccines, and less on injections and tablets. In the majority of cultures, including that of the UK, the bottle of coloured and strongly smelling medicine has greater appeal than the tablet. While the injection may be impressive at the time, it cannot be carried home and passed round to be examined by the relatives, as can the bottle of medicine. By offering such medicines to the mothers of the children we care for, we are not "teaching them to rely on the bottle of medicine". In their own culture they will almost certainly regularly use herbal and root teas, just as we may use unnecessary vitamins, and we should be substituting something that we know to be at least harmless for something which is unlikely to be beneficial and may be harmful (as has been shown in the case of the Jamaican herb teas which led to hepatic cirrhosis). We may be able to persuade the mother that her child is healthy and her concern over some minor symptoms was unnecessary but she may have difficulty in passing this message on to her relatives. If she arrives home bearing a bottle of "tonic", her time at the hospital will be justified among her relatives, who may have had to undertake some of her household chores for her, and perhaps have supplied the cash to make her visit to the hospital possible. The child may come with some trivial symptom, and if he is due for an inoculation he will receive this. The inoculation may well prove life-saving in the next epidemic, but to the mother, the bottle of red-coloured peppermint water costing 3 ¢ a gallon to make in the pharmacy may be a more significant medication.

Of the liquid medicines given, the "saline mixture" for diarrhoea may be the most valuable. This consists of a concentrated solution of sodium and potassium chloride and a colouring agent, and is diluted by the mother to make up a drink for the child if he has diarrhoea.

Figure 117

Arrangement of Furniture Which Allows Teaching and Supervision of Staff in Training.



Tablets are best pre-packed, as this reduces the problems of checking their distribution. Directions for their use may be stamped on the pack with a rubber stamp, or small duplicated slips included if they are packed in polyvinyl.

To the cost of the injection must be added the cost of employing the staff to give it, and the sterilization of the syringe. Clearly the number of injections given must be cut to a minimum and the senior staff should lay down criteria for their use.

A most important economy is for the common and simple medicines to be given out by the nurse herself. This saves particularly the mother's time, as she does not have to queue at a dispensary to receive her medicines. In this as in other activities, the senior staff will continually observe and discuss with other personnel what innovations or changes may lead to greater efficiency. For example, in dispensing liquid medicines, a wide-mouthed container into which a scoop will pass allows the nurse to measure out and dispense, through a funnel, into the mother's own bottle a known quantity of medicine. When instructing the mother in the quantity to give the child, locally available demonstration spoons are required. Holes are drilled in the handles of the different sized spoons; three spoons attached together with a keyring are less likely to disappear than one unattached spoon! The road-to-health chart is supplied with a polythene envelope.

THE ECONOMICS OF THE UNDER-FIVES' CLINIC

The cost of a visit to the clinic is approximately the same as that calculated for a health centre attendance and amounts to about $0.21. In arriving at this figure, salaries were costed at the local Nigerian rate, and the annual budget of about £6,000 ($17,000) was divided between the 80,000 patients attending the clinic at the research village of Imesi during the year. These figures include many adults, who take longer to see than children, and make no allowance for the research activities of the clinic staff. The true cost of a visit to an Under-Fives' Clinic may well be less than 5p ($0.14). So far, few other have been successful in reducing it further. In India, with a higher proportion of ill patients, clinics were costed at $0.20 per visit. In Malawi they have recorded a cost of $0.11 for each visit.

As already mentioned, most developing countries at present have around $1 (40p) to spend on health for each citizen, and are unlikely to have more than $4 by the year 2 000. Both these figures are in the region of 1 per cent of what is spent on medical budgets for health in Europe and North America.

TABLE 54

Examples of Recent Cost in Nigeria in ¢ of Some of the Material Used in the Under-Fives' Clinic

	¢		¢
Triple vaccine, one injection	9	Road-to-health chart in polythene envelope	5
BCG	20	Old tuberculin for Heaf test	2
Pyrimethamine, one year	7		
Chloroquine treatment for malaria	3	INH for one month, 200 mg/day	11
Sulphadimidine, 12 tablets in packet	6	Tetmosol to add to rubbing oil to treat scabies	12
Saline mixture or other medicine, 100 ml	1		

The present expenditure on Under-Fives' Clinics is probably better spent in terms of cost benefit than most other expenditures in the health field. However, it is still too high. Probably the greatest economy will be through training village mothers to run Under-Fives' Clinics in their own village. Their satisfaction may be through the responsibility and prestige they receive by helping their community with only a small financial incentive.

In the Under-Fives' Clinic, the majority of conditions could be prevented or treated at low cost. Table 54 contains figures that were first published in 1963, but the prices have been brought up to date. The items may all be purchased through normal channels.

DESIRABILITY OF COMBINING A CURATIVE AND PREVENTIVE APPROACH IN ONE CLINIC

Some experienced workers are still concerned with the possible danger of bringing all children together under one roof. Undoubtedly there is a slightly increased risk of infection. However, the author believes it is justified on the following grounds:

1. Measles, whooping cough and many other infections are more infectious in the prodromal stage, when the child is not "ill", and he is just as likely to be brought by his mother to the well-baby clinic. It is the mother who makes the decision where he should be taken.

2. In most traditional communities, unless preventive services are integrated with curative, the majority will not receive the preventive services.

3. Personnel and facilities are so limited that more effective care can be given to most children through a comprehensive service.

4. The separation into preventive and curative clinics arose historically because doctors in Europe failed to show interest in providing preventive services, particularly advice on feeding methods, and this function was taken over by the child welfare movement. This movement, which was run by voluntary agencies and town councils, developed a network of welfare clinics in the first half of this century. The doctors were adamant that the child welfare clinics should not offer any curative care. This separation of curative and preventive services did not arise out of any idea of removing the danger of infection to the well baby. At first only a minority of doctors were involved. Strict rules were enforced to prevent the two services being combined.

SOME STEPS THROUGH WHICH HOSPITALS MAY BECOME MORE DEEPLY INVOLVED IN COMMUNITY HEALTH CARE

By Dr David Morley

The ideas for this paper came originally from a meeting of the Christian Medical Commission. New ideas were included from Dr Carroll Behrhorst of Chilmaltenango, Guatemala. The paper was also revised on 2 occasions by Dr Maurice King and finally appeared as CONTACT 20, April 1974.

INTRODUCTION

"Inside our hospitals, we find modern practices and equipment, dedicated staff and a respectable rate of cure. Outside their walls, misery, poverty and disease march bleakly over the landscape." These are the words of Dr Carroll Behrhorst after a survey he made of church-related hospitals in the developing world.

What is such a system accomplishing if it meets such a small part of the medical needs of the people? Most of us would answer "Not much." Our thesis is that these systems, in terms of community health care, are not only an inefficient use of resources, but are blatantly unjust.

Can we widen our services so as to care for more of the people within reach of our hospitals, both church-related and government? The answer, we think, is "Yes, we can," but before suggesting some of the ways in which this might be done, something more must be said about the tragedy and even the terror that confronts us, as well as the opportunity. Something must be said about:

- The poverty of so many who live and die with so little in the shadow of the extravagances of the rich and the powerful.
- The erosion of so much traditional society by Western culture, which often provides so little in return.
- The one-sided "development" which, insofar as it takes place at all in the "developing countries", serves only to make the rich richer and to widen the gap between those who have and those who have not.
- The misapplication of modern technology which lands us by jumbo jet in a community for which it cannot even provide clean water.
- The comparative failure to provide personal services as compared with material ones as, for example, the many villages of India which have electricity and a good road, but are generally without agricultural extension services or even the simpler means of modern health care.
- The exploitation of the developing world which supplies the industrialized nations with physicians, proteins, and even prostitutes for their visiting tourists.
- The false gods in medicine — an 11-storey, £5 million teaching hospital block in a developing country, where patients enter by the back door, while a policeman guards the front one for doctors and nurses — a temple for the glory of the staff and of medicine, rather than for the care of the common man.

Such, then, are the products of some of the forces that beset us. We in the church-related and small government hospitals can do much to counter them by looking beyond our walls to the needs of the community as a whole and by cooperating with one another and with government. Particularly must we do all we can to devise new patterns for the provision of health care. In doing so, we must bring those whom we serve into the decision making, and practise medicine on our patients' terms with their total involvement. Their welfare and that of their community must be our ultimate criterion in every situation and decision. This means that we must help them to learn more about themselves and how best they can care for one another. Our first task must be not just to cure our patients' present illnesses, but to make knowledge and services available to them, so that they can help themselves. The success of such an endeavour requires a great change in doctor-patient relationships, but the future of both personal and community health care demands it and depends upon it.

COMMUNITY CARE: A CHALLENGE TO INNOVATION

All hospitals are set in their communities and exist

solely to serve them. Yet too many remain oblivious of what happens outside their walls, and it requires leadership, enthusiasm, imagination and love on the part of doctors if they are to see beyond the immediate wants of those who come to them to the largely unmet and unconceived needs of those who do not. If these are even to begin to be fulfilled, the hospital and the community have to serve, support and be concerned for one another; the hospital has to involve itself in the community and the community in the hospital. In effect, the challenge is to develop new patterns of community care, to innovate in providing at least some services for *all* the people, and always on their terms. To respond to this challenge is, we believe, one of the main responsibilities of all health workers at the present time. Doctors working for voluntary agencies or church-related hospitals have greater opportunities to experiment in this field, whereas those working for the state have perhaps a greater opportunity to change the whole system, although this is much more difficult. Where individual hospitals lead – and succeed – other parts of the health service may follow.

There are 2 major ways for a hospital to develop its community commitment. One is to supervise a network of health centres. Another and more subtle one is to lead the community in the improvement of its own health, that is, to initiate "community health action".

THE DEVELOPMENT OF A NETWORK OF HEALTH CENTRES

Because these are small units staffed by auxiliaries, they are comparatively cheap to build and run, compared with hospitals. They also have the unique advantage of being close to the homes of the people and can identify with them and achieve acceptance as part of the community. When well developed, they provide a wide range of services, especially those for maternal and child health, which provide a mother with antenatal care and family planning advice, besides immunizing her child, supervising his growth with a weight chart, treating his frequent episodes of cough and diarrhoea, and providing the family with health education. Most "developing country diseases" can be simply and inexpensively dealt with in these centres. Besides respiratory disease and diarrhoea, they include tuberculosis, leprosy, venereal disease, malaria, worm infestation and malnutrition. Because of the great benefit they offer for comparatively little cost, the development of an effective "health centre outreach" should be an objective of the very highest priority for every hospital. The coverage that can be achieved by investing in health centres rather than in hospitals is well shown by the following study from Tanzania.

Table 1

Options for Capital Investment and Population Coverage in Tanzania

	A regional hospital	15 health centres
Capital cost (million shillings)	6	6
Running costs/year (million shillings)	2	2
Admissions/year	9,000	15,000
Outpatients attendance/year	400,000	1,000,000
Population covered	10-30,000	300-500,000

Gish, Oscar (1973).

Health centres will sometimes have to be developed by the hospital. Often, however, there will be government health centres, dispensaries or aid posts nearby, which a church-related hospital can support and supervise. Staff training and retraining is likely to be the critical issue, and although health centres are often run satisfactorily by nurses, it is the medical assistant – as he/she is understood in such areas as East and Central Africa – or the health extension officer of Papua New Guinea, who most easily takes to this role. The development and even perhaps the initiation of staff of this kind in countries where they do not exist is something which every doctor who is concerned for the health of a community should do everything possible to promote. Incidentally, similar staff are now being trained in highly developed countries such as the USA. In the developing countries, this is the only way in which in the foreseeable future all the people, particularly those in the rural areas, will ever be provided with primary medical care. Not surprisingly, most of the resistance to their use arises from urban doctors who see their private practices in danger or work in large hospitals and are concerned to raise "standards" of cure beyond the reach of those in the rural areas.

COMMUNITY HEALTH ACTION

A hospital's role in "community health action" is less easy, but at least equally valuable. Because the term may be unfamiliar, here are some ideas as to what it means and some of the countries where they have been developed:

- Run nutrition rehabilitation centres: Kenya.
- Develop an "outpatient village" which provides simple accommodation where hospital patients

who come from far away can live, cook and care for themselves: Rhodesia. Such a village can also be used by mothers in the last months of pregnancy as in the "maternity village": Nigeria.

- Choose literate farmers to go for training one day a week in symptomatic diagnosis, and when they are trained, the community controls their activities but sees that they get sufficient remuneration: Guatemala.
- Develop and supervise the "social area" that exists close to most outpatient departments: Malawi.
- Buy food wholesale and sell it retail at no profit: Zambia.
- Give members of isolated village communities a brief hospital training, after which they are provided with boxes of medicines which are replenished at cost by the hospital: Karen County, Thailand.
- Weigh children at Under-Fives' Clinics and give health education: Malawi. There is, incidentally, no reason why community volunteers should not also do the immunization under supervision.
- Organize local courses on nutrition and family planning, or anything else which may be necessary.
- Recruit panels of blood donors: Nigeria.
- Build or repair clinic and hospital buildings: Papua New Guinea.
- Improve wells, springs and latrines: Uganda.
- Campaign for road safety.
- Teach nutrition in schools.
- Organize fund-raising walks or flag days, etc.
- Provide clerical services.
- Organize a hospital shop or hospital gardens.
- Read to the patients or write letters for them: Zambia.

Some of these suggestions involve the complementary process of inviting the community to become involved in the hospital, which requires local leaders to join its management committee as well as being concerned in such matters as fund raising and the promotion of various forms of voluntary service. Before starting such community endeavours, try to identify opinion leaders in the community and involve them from the beginning, bypassing them is a recipe for failure. It is even more important that these activities fit in with some simple form of district health plan.

MAKING A DISTRICT HEALTH PLAN

This is where the major exercise in judgement will come in. What can be done will depend on the community diagnosis, the resources that could become available, and the wishes of the people. The plan should contain a list of priorities with targets to be reached at particular times and take account of whatever else is being done in the district. Where relevant, it should fit into the general health plan of the country. One possibility that will have to be considered is that of training new cadres of staff.

Does all this sound complex? In a fully comprehensive form, it will certainly be unrealistic, but on a more modest scale, it is likely that most hospitals could make a useful plan, exploit untapped resources and increase their service to the community.

THE COMMUNITY DIAGNOSIS

This has been defined as the pattern of disease in the community described in the terms of the important factors which influence this pattern. If one of the problems is malnutrition, then how much is there, and of what kind is it? What socioeconomic factors are responsible? From a hospital ward, the answers may seem to be simple, and the true nature of the problem may only be revealed through the careful study of a number of malnourished children at home. A useful way of thinking about this, particularly as far as middle-level staff is concerned, is to think of food going along a path from the fields where it is grown to the body of the child who needs it, the steps in the path being such processes as clearing, planting, growing, harvesting and storage, etc. (Figure 1). Anything which blocks the "food path" at any of its steps, be it badly managed bottle feeding or spoilt food stores, for example, is taken to be a factor responsible for malnutrition (Figure 2).

In this useful model, the community diagnosis of malnutrition is taken to be a measure of how much of it there is in the community, combined with a list of the "blocks on the food path", and an indication of their prevalence (how widespread they are), their severity (how bad they are when they occur), their importance to the community, and their manageability (how easy or how difficult they might be to remove, especially by health education). These 4 criteria – prevalence, severity, community concern and manageability – can be weighed in discussion with staff and community leaders, using a blackboard. A convenient way to do this is to use the "plus notation", 1, 2, 3 or 4 pluses being given in each case. The product of multiplying these pluses (not adding them) gives a better order of priorities than working on hunches (Table 2).

In the example given in Table 2, the group was asked to give a + to ++++ value on a blackboard to the questions. This is a method of

Figure 1

THE FOOD PATH

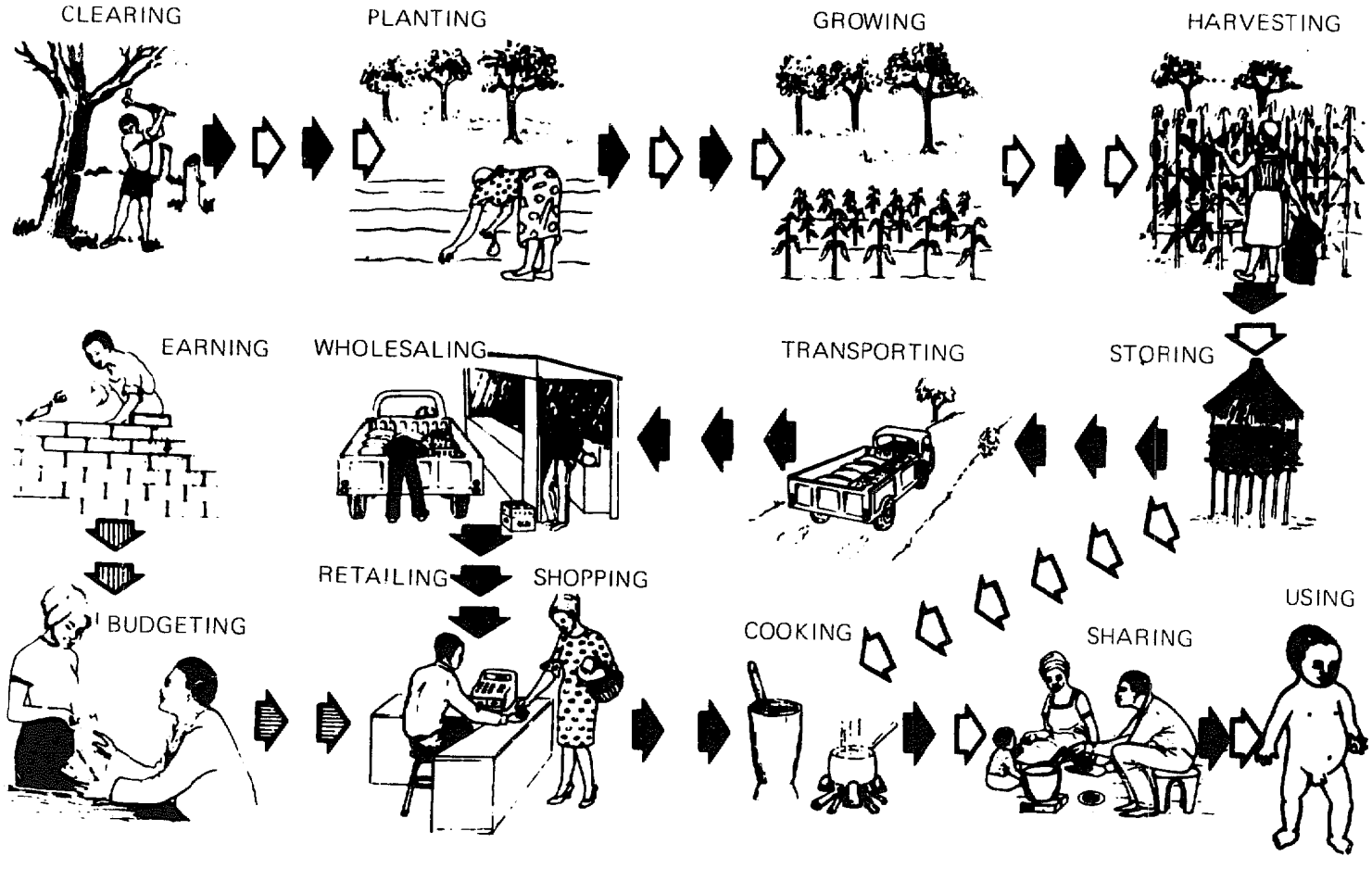


Figure 2

THESE ARE ONLY SOME OF THE BLOCKS ON THE FOOD-PATH !

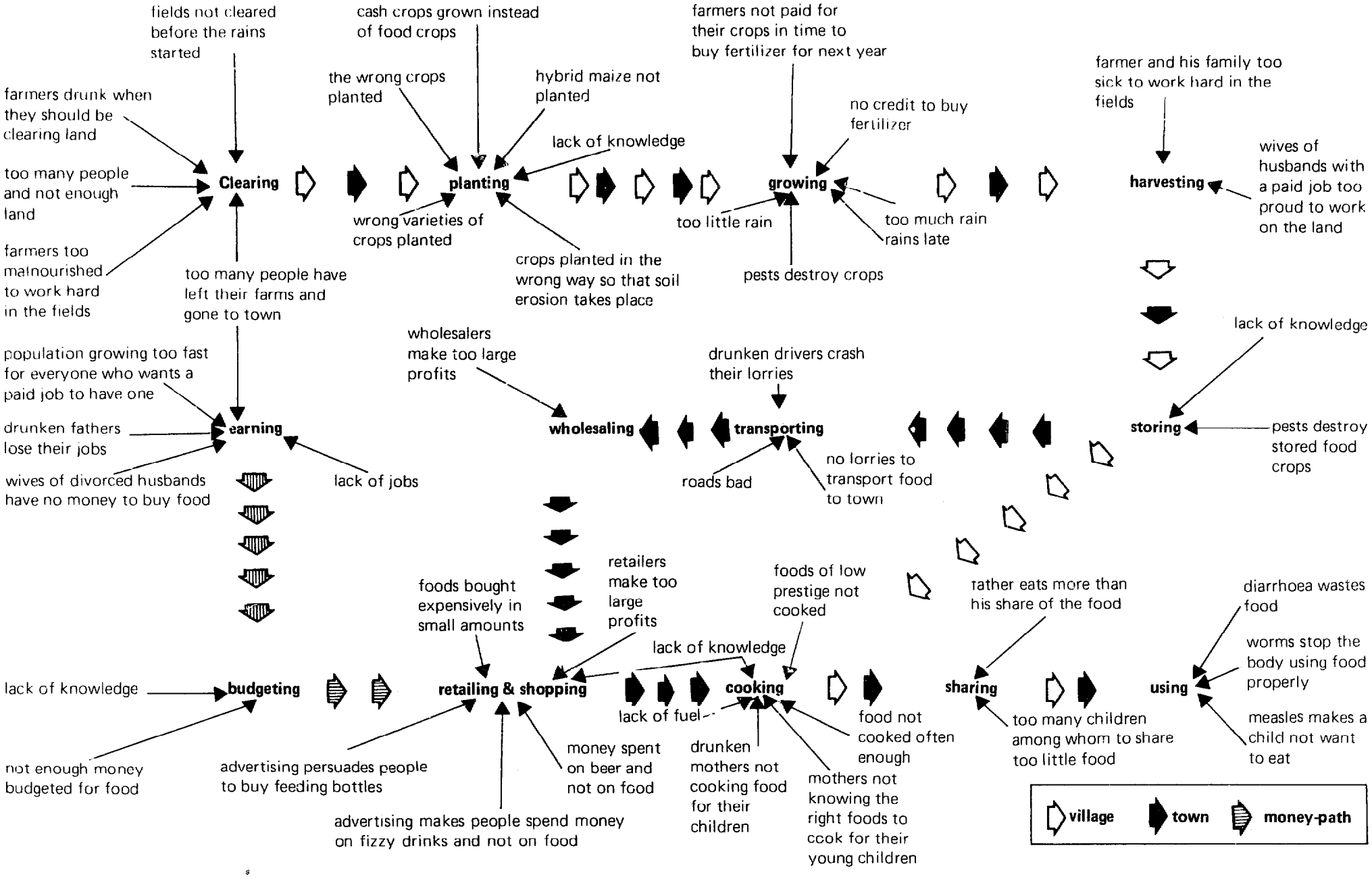


TABLE 2

Comparison of the Criteria for Measuring Malnutrition in a Community

	Community concern	Seriousness	Prevalence	Manageability	Total
Too many people and not enough food	++	+++	+	++	12
Cash crops grown instead of food crops	+	+++	++	+	6
Too little rain	+	+	+	+	1
Pests destroy stored food crops	+++	++	+++	+++	54
Diarrhoea wastes food	+++	++++	+++	++	72
Lack of knowledge of shopping	+	+++	+++	++	18

encouraging group discussion and training in decision making and can have importance in setting priorities in a development situation. In the Table, some of the blocks on the food path have been evaluated for an imaginary population. The number of pluses are multiplied to give the total.

"Too many people and not enough food". In this community, the group decided that, at present, there is little pressure on the land (community concern ++); but present population growth is a potential danger (seriousness +++). The present population has a long birth interval and families are small (prevalence +). Due to cultural attitudes, family planning is not widely accepted (manageability ++).

"Too little rain." Rain this year was adequate (one + under all headings).

"Pests destroy stored food crops." A massive increase in rats is much discussed (community concern +++). This year, there was some destruction in the grain stores (seriousness ++). Almost all farms were affected (prevalence +++). Health inspectors and agricultural extension officers with knowledge of better storage methods are available (manageability +++).

"Diarrhoea wastes food." The communities are bringing children with diarrhoea for treatment (community concern +++). Experience with weight charts has shown that there is much loss of weight with diarrhoea (seriousness ++++). Diarrhoea is frequent in the weanling children (prevalence +++). Recent developments have much improved the management of dehydration, but prevention of diarrhoea is still difficult (manageability ++).

Ideally, the community diagnosis should take account of all diseases but, in practice, it will only be possible to consider some of them, among which malnutrition is likely to be a priority.

What is Happening in the Homes of the People?

Much insight into the community diagnosis can be obtained by a determined effort to find out what is happening in the homes of the people. The health needs of the community may look quite different when seen from the home of a tuberculous mother, and the only way to find out what they really are is to visit people at home. This is a job for trained staff who should ask questions about death and disability in the household over the past year, together with how and and where any illnesses were treated, what happened, and what they, the people, think about them. When making a survey of this kind, it is useful to include such a question as, "What do *you* think your needs are, and how do *you* think we can help you? " Too often we offer services on our terms, at our direction, with *us* telling *them* what their needs are. Local people usually have clear ideas about their own needs and how they might help themselves with some outside assistance. In new areas of work, community health committees of local people should be functioning before the first aspirin is given out or the first bandage put on. Under suitable circumstances, these grass-root committees may select the people to be trained, and also supervise them, discipline them, pay them, and in effect take complete charge. They may also set the standards of service and determine the price charged for it. In time, these committees offer the effective way to get away from our present systems which, as already suggested, are both inefficient and unjust.

What Happens to the Patients when They Get Home?

Hospitals seldom know what happens to their patients once they are discharged. This is to be regretted, since it is usually easy to visit some of them at home, even if it does require particular care in recording their addresses, together with a certain expenditure in time and transport. So, suggest to the staff – both lay and paramedical – that they visit some newly discharged patients in order to find out what has happened to them, to see how far their environment has affected their recovery, and to discover what they thought about their stay in hospital. Many diseases can be investigated in this way and patient care, both curative and preventive, better facilitated. It is likely to be particularly rewarding to look into those diseases about which there are strong local beliefs, such as epilepsy, leprosy and tuberculosis, and conditions such as tubectomy, the birth of twins, or kwashiorkor.

What Are Other People Already Doing in the District?

Before doing anything ourselves, we need to find out what, if anything, is already being done in the same or related fields. This includes government and church-related institutions, together with any special agencies that may be concerned. In this search to see what already happens, we need to look beyond the health services, and if nutrition is our interest, we should know what is going on in agriculture and education. Only when we know what is already happening are we in a position to cooperate, both in overall planning and at a personal level.

The personal approach is an essential beginning, so visit the local representatives of the agencies whose assistance you would like and personally ask for their help. They may well be able to advise you best on how and when to apply more formally for the help of their particular organization.

What Resources for Additional Health Care Are Available, or Could be Obtained, and Where Are They?

At first sight, it might seem that every resource is stretched to its limits or beyond and that no more can be done. However, a deeper inspection will probably show that this is not completely true and that unexploited resources for health care still remain. They can usefully be thought of as being available at 4 levels: in the hospital, in the district, in the country as a whole, and in the world at large. Resources for health care include money, people's time – both skilled and unskilled – buildings, vehicles, and last but not least: love and real concern. They include those that actually exist and those that might be generated. The key concept here is that *any social group anywhere represents a potential community resource for improved health.* The larger, more cohesive, better led and more disposed towards health care a group is, the more useful it is likely to be. Beginning inside the hospital, such groups range through unions of hospital employees, village and tribal groups, political groups, church congregations, secondary schools, branches of such organizations as Rotary, the Round Table, the Red Cross or Red Crescent, such departments of government as the district teams for agriculture, education or community development, and industrial groups such as those in mines, factories or plantations. The higher levels of many of these groups can also be approached on a national scale, such as through the headquarters of ministries or national organizations. Finally, there are agencies concerned with the administration of small-scale aid for the world as a whole, such as Oxfam, the Freedom from Hunger Campaign, and the Save the Children Fund. The larger ones (UNICEF, UNDP, etc.) only accept requests for aid from governments. Having identified them, the next question to be asked is, "What can these groups be persuaded to do, give or lend in the betterment of the health of the district? "

What Kinds of Workers Can We Train?

Many hospitals are already fully extended in training and cannot do more, but there are others which may be able to train a new category of worker for service in the community. These workers will need different names in different places, but the terms village medical aide (Tanzania), aid post orderly (Papua New Guinea), health extension worker (Guatemala), or the barefoot doctor of the People's Republic of China, have been used. Sometimes the necessary result can be achieved by giving a medical role to staff of other kinds. Workers should be selected by the community to be served. This will be difficult at first. One example of how to discover suitable people for training is the "school for parents" set up in the Congo. Both parents bring their child once a month to be weighed, immunized and cared for, and the parents receive training in child care, nutrition and farming. The parents pay to attend the school and at the end of 3 years receive a certificate.

Courses should be arranged so that trainees can continue their usual work and maintain their community identity with a minimum absence from home. Training programmes at distant centres too often isolate workers from their communities, disrupt their families, and so alter their lifestyles that it is difficult for them to return to their villages. When absence from home is necessary, courses should be short. Those lasting a year or more may fit the Western ideas of classroom teaching with their formal curricula but may not prepare workers to serve their communities. Too often they leave workers as social misfits.

These workers have to be trained on the job, by seeing and treating patients in hospitals or health

centres. For them, treatment has to be by symptoms, that is, by diagnosis at a simple level. Even the sophisticated worker too often errs in interpretation of symptoms. We find that symptom treatment results in a relatively low error in management, realizing that many medical problems are comparatively simple and, with nature's help, may heal themselves. Both sophisticated and unsophisticated societies demand treatment, even if this has a marginal effect in relieving symptoms or shortening the course of the illness.

A CHANGE OF OUTLOOK

Changing Attitude Through Dialogue

Many doctors are accustomed to look beyond their patients' beds to the needs of the community from which these patients come and have long seen that a community outlook is necessary, if they are to do all they can for society. But for others, and for the teams they lead, this is a concept and challenge that has yet to be fully accepted. If it is to be met, the first step must be a true community outlook on the part of doctors as the leaders of their teams. For some of us, this will mean a radical change in the way we look at our work and our role. This is not the place to argue why such an outlook should be necessary – we take this for granted already – but rather to consider what it means in terms of practical service and dedication, and to suggest ways in which we can promote it in the predominantly hospital-oriented teams with whom many of us work. Very often, the initiative for such a change in orientation and purpose will have to come from the doctors themselves. Increasingly, however, governments and governing boards of church-related hospitals are taking it upon themselves to be sensitive to this concept, but even so, the individual doctor who is intent on making such a change would be wise to gain the backing of the local authority or governing board first.

If the staff of a hospital is to achieve anything in the community, it will need an enthusiasm which all share. How can this be achieved? How can we change the outlook of a previously inward-looking hospital so radically that its staff look outwards into the community? The best way is to discuss and study the medical needs of the community with the staff: to create a dialogue among them. We must also think of the present and future role of the traditional healer and the dispenser of injections in the provision of health care. This is much more likely to lead to a change in outlook than if the staff are ordered to do something they do not understand. Such a dialogue attempts to change the attitudes of the hospital staff – both as a group and as individuals – at all levels. If it is to be effective, it has to be founded on such facts as those that might be obtained by the methods described above. This dialogue is a first step towards the time when the staff will all participate through discussion in decision making.

The data that have been obtained about the community are of little value unless they have become part of the thinking of a hospital and have influenced its practice. Whatever has been found must thus be discussed, preferably in groups of between 6 and 12 people, so that group opinion can be achieved and group action suggested. Because local data may not be complete and may miss some important problems, especially in the field of health education, questions for discussion can be usefully supplemented by some of those listed in the appendix. Before coming to a meeting, it is suggested that staff be asked to answer anonymously a number of them. Their answers should be analysed beforehand and those over which there is a marked division of opinion be used for discussion. Their purpose is to lead to a clear group opinion on some important issues, and no suggestion should be made that some are "right" and others "wrong". (See appendix.)

Just as many of us doctors are questioning our present role, so also are some of our colleagues in the areas of teaching and agriculture. Many problems are common to us all, and where interests overlap, there is opportunity for discussion; so try to bring in workers from related fields. Adult literacy and health education, for example, can become close allies; matters of health, if well presented, interest everyone and encourage the literate to read and educate themselves towards better health. What should be the content of health education in schools? Can the staff from the hospital help? Can agricultural extension officers assist in nutrition education? These are only a few of such issues.

Group discussion will probably influence those who emphasize the basic curative functions of a hospitals. The group should discuss the areas in which delegation is possible so that more time can be spared for preventive community services. The greater potential that these have for improving health care must be balanced against the desire of the community for curative services and our determination that it should be excellent.

Group Visits

If a community outlook on the part of the hospital is held to be important, no reasonable way of achieving it should be neglected. Another way is through group visits to other centres where progress in community care is being made. The visiting group should include representatives of the several disciplines within the hospital, who should discuss what they have seen before reporting back to their colleagues. In each country, a list of such centres willing to receive visitors might well be circulated.

TWO FURTHER ASPECTS OF COMMUNITY CARE

Letting the Community Keep Its Own Health Records

Every aspect of medical work needs to be oriented towards the community, and not the least important are outpatient record systems. No satisfactory ongoing system of health care can exist without adequate records. One technique that is now well established is a progressive move of record systems out of the clinic into the homes of the people. This is a difficult step for many workers to accept. It has, however, proved very effective, particularly for children's growth charts, or "road-to-health charts" as they are sometimes called. When kept at home, they can be made use of by agricultural extension workers, the school teachers and pastors as well as by health workers visiting the family. Their presence in the home also allows members of the community itself to estimate such indices of health care as levels of immunization or clinic attendance, tasks that may well be within the competence of suitably supervised pupils from secondary schools.

Using the road-to health chart for family planning

Every 5 days another million people are added to the planet Earth, but for many of our patients, this threat to their children and grandchildren is of little consequence. Nevertheless, many mothers are commendably concerned that there should be an adequate birth interval between their children. Hospitals already using some form of road-to-health chart may be interested in extending its use into family planning by using it to motivate mothers into accepting and achieving a longer birth interval, and so making it a tool which will benefit the whole family. An example of the road-to-health chart used in this way is given in Figure 3. The nurses or medical assistants seeing the child discuss and record the mother's attitude to birth interval. The ideal may, in many communities, be about 3 years. This discussion is recorded along the top of the chart, the objective being to help the mother to use family planning methods before the "vulnerable" month, that is, the month in which she has a 5 per cent chance of conceiving again. (Morley, 1973.)

CONCLUSIONS

Finding the Time

Many of us are over-extended, and extra work in the community may seem an impossible burden. We may find, however, if we look carefully at what we actually do, that time can be made. One way to make it is to keep a careful diary, over a week or so, of how we actually spend our time and then go back over it, seeing which of our activities might be shortened or delegated (Figure 4). When this is

Figure 3

Recently Modified Road-to-health Chart Including Birth Spacing

(Institute of Child Health, University of London)

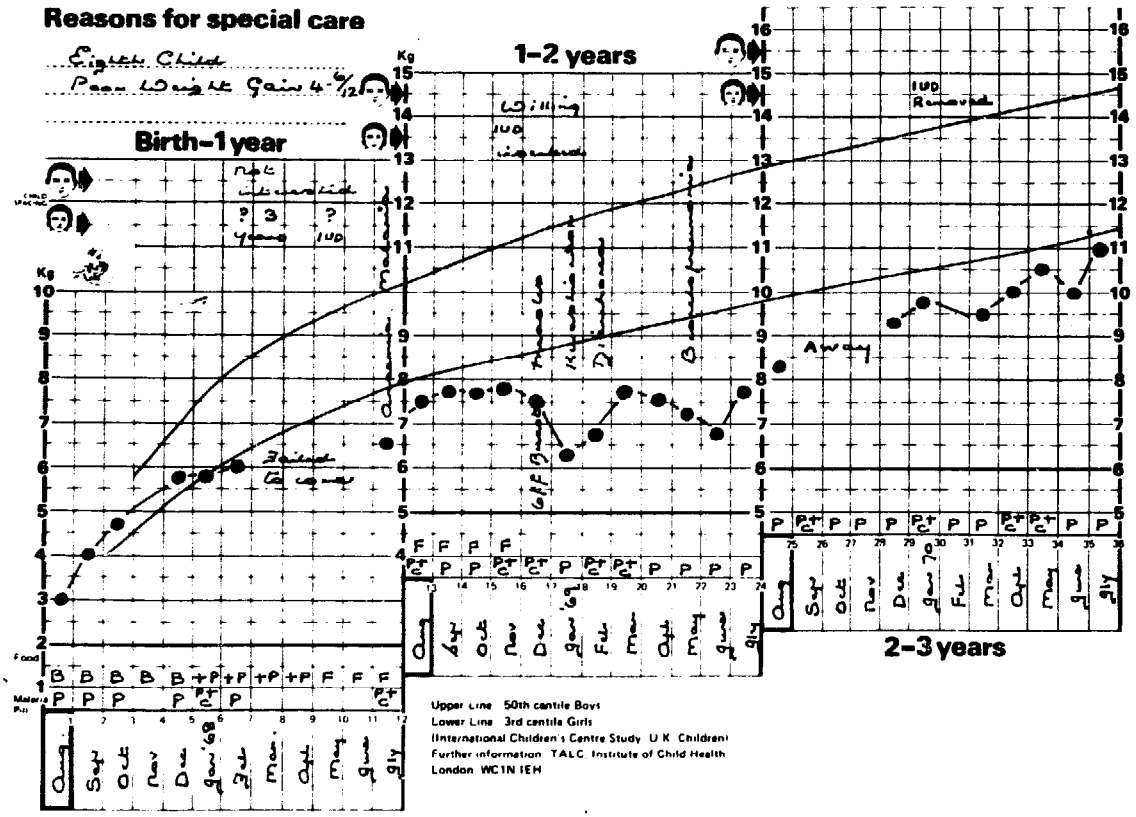
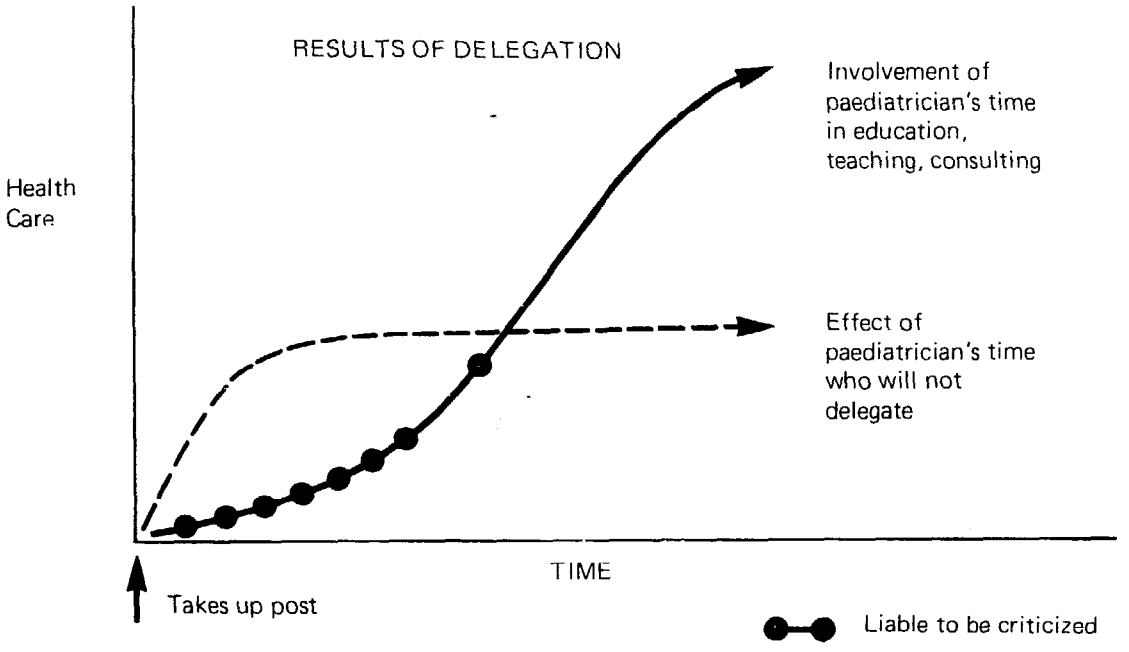


Figure 4

Results, in Terms of Effectiveness of Doctor's Time, of Delegation



done, we may find that time can be found for at least some of the kinds of service suggested here. We should have liked to have cited carefully documented examples, but none could be found. This is not to say that they do not exist – we know of pioneers in this field in several countries – but that most have not been suitably written up. Church-related hospitals together with government centres have a great part to play in developing new patterns of community care in the countries they serve. In this process of innovation we all need to learn from one another, in large ways and small, from both successes and failures.

APPENDIX

ATTITUDES TO COMPREHENSIVE COMMUNITY CARE

The following statements are designed to find out your personal opinions about various aspects of health and hospital work. Although some of them may be controversial, you should feel free to respond to each question without considering this to be a form of "examination". Please note the following points :

1. You should tick "Agree" if you accept the statement as it stands, "Doubtful" if you feel you cannot express an opinion, and "Disagree" if you feel the statement as it stands should be changed even in minor respects.
2. For better understanding of the basic concepts in health care, there will be a discussion period based on an analysis of the group's responses to the statements after you return this completed questionnaire.
3. Your name or signature is not required; however, if you insert a random number at the top of this questionnaire and remember it, you will be able to recover your questionnaire for the discussion.

	Agree	Doubtful	Disagree
1. Mothers may believe that a thermometer, stethoscope and stomach tube are part of the treatment of malnutrition. In spite of this, they will understand that an improved diet has been the main reason for their child's recovery in the hospital ward.			

	Agree	Doubtful	Disagree
2. Whatever the state of neglect or wrong treatment of her child, it is never justified to get angry with a mother.			
3. Lay persons and community members should take part in the planning of health programmes at all levels.			
4. "Doctors doing the job of a medical assistant" present a more frequent problem than "Medical assistants doing the job of a doctor."			
5. There need to be laws in every country to prohibit nonmedical healers and curers indigenous to the community from practice.			
6. Time and resources spent in maintaining a base hospital are essential for training, even if it prevents one from participating in village preventive work.			
7. Auxiliaries can be effective substitutes for physicians.			
8. Opinion leaders are people with more knowledge and ideas than others.			
9. The more we can teach people about health, the healthier they are likely to become.			
10. We can be satisfied if 70% or more of the people in a community see a well prepared health education film.			
11. Professionals are taught to solve problems; auxiliaries are taught to follow instructions.			
12. In the medical profession, the doctor's and nurse's chief concern is the patient. His/her family life must not interfere with professional life.			
13. The first priority is to cure the sick child. If the mother is likely to be in the way or interfere with treatment, she can be excluded as long as the child is not suckling.			
14. National programmes such as TB, Leprosy and Family Planning, with their own budget, are to be avoided.			
15. Dollar for dollar, money spent on sanitation is more important than any other health programme.			
16. Although preventive work is a first priority, one is bound to satisfy whatever commitment to curative work a hospital's resources make possible on practical, psychological or ethical grounds.			
17. Medical education needs to conform to international standards of education and not to national programmes evolved to meet the country's immediate needs.			

	Agree	Doubt-ful	Dis-agree
18. The "Well-Baby Clinic" arose for historical reasons. We should promote comprehensive curative and preventive care at *every* contact the child has with health services.			
19. Fields outside health, such as agriculture, education, economics, influence health more than existing health services.			
20. The most important advances in health lie in influencing the behaviour of the people.			

NB. The questions in this appendix are given only as possible examples. Others with local flavour can be prepared to suit the specific situation.

CHAPTER VI

PRIMARY HEALTH CARE AND THE VILLAGE HEALTH WORKER

This article was gleaned from reports by the Director General of the World Health Organization, Dr Halfdan Mahler, and other documents related to the January 1975 meeting of the Executive Board of WHO, all of which reflected its strong emphasis on the promotion of national health services and the development of primary health care as a principal means to that end. It was printed in CONTACT 25, February 1975.

THE PROMOTION OF NATIONAL HEALTH SERVICES

The Executive Board of the World Health Organization, meeting in Geneva during the last two weeks of January 1975, resolved to give top priority to the promotion of national health services. This policy decision was given a position of "crucial priority" because of its concern over the maldistribution and lack of coverage of health services – a worldwide problem. It defined the problem in the following terms:

"The Board is of the opinion that in many countries the health services are not keeping pace with the changing populations either in quantity or quality. It is likely that they are getting worse. Even if this is looked at optimistically and it is said that the health services are improving, the Board considers that we are on the edge of a major crisis which we must face at once as it could result in a reaction which could be both destructive and costly. There appears to be widespread dissatisfaction of populations about their health services for varying reasons. These dissatisfactions occur in the developed as well as the developing world. They can be summarized as a failure to meet the expectations of the populations; *an inability of the health services to deliver a level of* national coverage *adequate to meet stated demands and the changing needs of different societies; a wide* gap (which is not closing) in health status between countries, *and between different groups within countries; rapidly* rising costs *without a visible and meaningful improvement in service; and a feeling of* helplessness by the consumer *who feels (rightly or wrongly) that the health services and the personnel within them are progressing along an uncontrollable path of their own, which may be satisfying to the health professions, but which is not what is wanted by the consumer.*

"The majority of the people in the disadvantaged areas of most countries of the world do not obtain sufficient care or otherwise benefit from known health technology. Health services which should *provide coverage to these populations in fact provide services to only a very small proportion of the population they are supposed to serve. Furthermore, whenever health services have been provided, they have been often fragmented and isolated from other activities directly or indirectly related to health and have not corresponded with the life styles and living conditons of the population. Consequently, services have been unable to give emphasis to consumer preferences and to make medicine 'belong' to those whom it should serve.*

"In the absence of any health services or in the presence of unsatisfactory services, the population has had to rely almost exclusively on its own indigenous resources. The care offered by traditional birth attendants, herbalists and others, and the advice and practices passed on from one generation to the next have had to serve the needs of these populations. The knowledge inherent in these community-based health activities and the manpower required are a valuable resource for the future development of the health services. If the resources available to the community and the resources available to the health services could be brought into harmony or, in other words, could become indistinguishable, except perhaps in function, then one would no longer describe services as not belonging to the community. Degree of satisfaction would no longer be the question asked of the community by the social researcher; it would be a self-imposed criterion of a successful operation.

"A series of major national efforts to develop primary health care services *at the community level is seen as the only way in which the health services can develop rapidly and effectively. The prevailing approach to the development of primary health care has been the transfer of health technology from one context to another: developed to developing as well as urban to rural. This approach has failed to meet the needs of today; a radical departure from*

conventional health services approaches is required. To depart radically from these approaches is to require that new services are built up out of a series of peripheral structures that are designed for the context they are to serve. Certain basic principles must be adhered to if these design efforts are to be successful. These follow directly from the above discussion and include:

i) Primary health care should be shaped around the life patterns of the population it should serve.

ii) The local population should be actively involved in the formulation of health care activities so that health care can be brought into line with local needs and priorities.

iii) Health care offered should place a maximum reliance on available community resources, especially those which have hitherto remained untapped, and should remain within the stringent cost limitations that are often present.

iv) Primary health care should be an integrated approach of preventive, curative and promotive services for both the community and the individual.

v) All health interventions should be undertaken at the most peripheral practicable level of the health services by the worker most simply trained for this activity.

vi) Other echelons of services should be designed in support *of the needs of the peripheral level, especially as this pertains to technical, supply, supervisory and referral support.*

vii) Primary health care services should be fully integrated with the services of the other sectors involved in community development (agriculture, education, public works, housing and communications).

"The concerns identified in the previous section can be said to be universal. There are few countries that can argue that these concerns do not apply to them. It has been stated that in the Americas as much as 37 per cent of the population are at present under-served, and in Africa, the Eastern Mediterranean, South-East Asia and in the Western Pacific (excluding China) the population of 1,660 million in 1970 may be 80 per cent rural and as many as 1,075 million may not have access to primary health care.

"It is accepted that while the need is apparent for action which is consistent with the principles identified earlier, the country response to this need may be unique for each country. These variations are not only varying responses to the different health needs within each country, but they are also national expressions of the differences in social and cultural background, political structure, economic realities and national practices and policies. It is suggested, in spite of these differences, that countries or regions within countries requiring action may yet pursue the goal of primary health care by developing a new tier of 'primary care', by expanding or reorienting existing health resources in service of this aim, and by making maximum use of ongoing community activities, especially developmental ones, for the promotion of primary health care."

One of the major factors hindering the development of health services for rural, periurban, nomadic and remote populations has been the absence of clear thinking about the kind of health personnel needed to provide the necessary services at these levels. (While, for the rest of the presentations in this issue, we use the terms "village" and "rural areas", we in fact mean to include these other groups; the periurban and slum dwellers, the nomadic groups, and those in remote or inaccessible districts.)

This new cadre of health worker is emerging in many different localities as innovative programmes take form. The workers are the product of various training programmes ranging from 2 weeks to 3 years. They are called by many names, among them being village health worker, primary health worker, health promoter, health auxiliary, dispensary attendant or assistant, paramedical worker, doctor's assistant, first aid worker, and so on. For the rest of this paper, we will use the term "village health worker" (VHW); this is not to imply that we insist that there be uniformity or that this be the name, but simply for convenience. This, then, is the individual referred to in basic principle No v) above. And in conformity with the conviction that *primary health care must of necessity be community-oriented* (see principles i), ii) and iii)), *the selection of such a person for training as a VHW must be made by the community.* As experience with this type of worker is growing, this is emerging as a matter of essential and probably universal importance. Ideally, the VHW is recruited from among the villagers, can be trained in or near the village, and so will truly belong to the people. With training, the VHW can be used to impart health education, change the community attitude to health and give simple medical care. In its working document, presented in the form of a manual and entitled, *Training & Utilization of Village Health Workers**, the WHO states:

"Admittedly, these health workers will not be able to solve all the health problems arising in a village. However, this programme is not aimed at producing ideal conditions but at tackling the most common and urgent problems encountered. It seeks to bring

* The manual *Training & Utilization of Village Health Workers* was published by WHO as: *The Primary Health Worker: Working Guide, Guidelines for Training, Guidelines for Adaptation.* WHO Experimental Edition. Geneva, 1977.

about a gradual improvement in the health of various population groups by strengthening the existing health services and by providing a minimum level of service as a point of departure in places where there had been nothing or practically nothing before.

"The VHW will give practical expression to the village's own determination to take over responsibility for the health of its people, and to make up in part for the deficiencies of the existing health services. The health worker will represent the forward outpost of the health services among the population, although his functions and his range of action will be circumscribed and clearly defined. His activities must not only be desired by the village but must also be followed up, supplemented and guided by a supervisor belonging to the official health services. Such supervision is an essential and integral part of the village health worker concept. The village health worker must not be left to stand alone. He should be envisaged only in the context of a national health service, as the advance guard of the health network and as a small part of a much greater whole. The village health worker will be the link between the village and its nearest health centre or hospital. His contribution will be to the development of the outer reaches of the health services and will be given in close liaison with the other levels of the national health administration."

In the same document, WHO offers a few standard guidelines for the selection, training and role of the VHW, which we have summarized as follows:

ESSENTIAL CHARACTERISTICS OF THE VHW

Who is He/She?

The VHW is a man or woman who, if possible, can read and write, and is selected by the village authorities or with their agreement to deal with the health problems of individual people and the community.

Who Will He/She Report To?

- The VHW will be responsible both to the village authorities and to a supervisor appointed by the official health services of the country.
- The VHW will be paid (in cash or in kind) by the village for his/her work, which may be full-time or part-time, depending on requirements.
- The village will provide a hut or a room to be used only for the health activities.
- The VHW will follow the instructions given by the supervisor and will work in a team with that supervisor.

What Training Will He/She Receive?

The VHW will receive an initial period of training of 6 to 8 weeks from the official health service of the country and will also be given a regular annual further training lasting 2 to 3 weeks. Training will be of a practical nature and will be given near the village. Preferably, the supervisor should give the instruction. The Manual/Practical Guide should be translated into the local language.

Role and Tasks of the VHW

The work of the VHW will cover both health care and community development, as a person's health and that of the community in which he/she lives is so much affected by an improvement in the quality of the environment.

The health work of the VHW will be restricted to what has been taught. VHWs must realize their limitations and be aware that there is only a restricted number of things they can do. They will not be able to solve all the problems they meet, but it is hoped that they will be able to help in dealing with the most common and most urgent ones.

The community development work of the VHW should serve to encourage the village authorities and the village people to show initiative and take interest in any activity likely to improve living conditions in the village. The VHW should first consider what can be done locally with the village's own resources at the least possible cost.

The VHW's duties will depend on the problems met. These will vary from one country to another, and it is impossible to draw up a list of problems that will be applicable throughout the world. This is why the example list given earlier should only be taken as a specimen. However, many problems on this list will be met with by most VHWs. For that reason, it seemed possible to prepare a manual that would cover nearly all the most common concerns of the VHW, even though it was clear that to meet the actual conditions existing in any community, some problems might have to be dropped and others added.

In view of what has been said above, the VHW should:

- care for the health of the villagers and look after community hygiene in the village;
- give care and advice, in accordance with the instructions written down in the manual or given by the supervisor, to any villager who consults him/her;
- send patients to the nearest health centre or hospital in any case in which the manual instructs such action (evacuation or referral) and in any case not covered by the manual. The VHW should therefore confine care and treatment to those

cases, conditions and situations described in the manual;

- with authorization from the village authorities, visit all dwellings and give those living in them advice on how to prevent disease and learn good habits of hygiene.

In addition, the VHW should:

- make regular reports to the village authorities on the health of the villagers and on conditions of hygiene in the village. Get the village authorities and the village people to provide the help and support needed for his/her work;
- keep in as close contact as possible with the superior so as to be able to give of the best in his/her work and to obtain the equipment and medical supplies needed;
- promote community development activities and play an active part in them.

This assumes that the VHW:

- is available any time of the day or night to respond to any emergency calls;
- acts in all circumstances with common sense and devotion to duty and in awareness of his/her limitations and responsibilities;
- does not leave the village without first informing the village authorities;
- takes part in the periods of training organized by the health service.

The manual itself gives a detailed description of the VHWs' tasks and will thus enable them to deal with about 30 current and urgent problems.

CHAPTER VII

HEALTH CARE FOR ALL–THE NEW PRIORITY

The 4 documents which follow were first prepared for and printed in CONTACT 26, April 1975.

INTER-CHURCH COOPERATION IN NATIONAL HEALTH CARE PROGRAMMES

Those who are familiar with Christian Medical Commission literature and reports will have noticed frequent references to national coordinating and planning agencies. This latter phrase is used to describe a situation in which those churches engaged in health care programmes, regardless of denomination, have chosen to form an organization which enables them to work and plan together for more effective service in meeting the health needs of the country in which they are situated. Cooperation, at various levels, has existed in some countries for many years, but usually in the form of separate Catholic and Protestant organizations. The motivations for cooperation were usually the need for fellowship, like with like, for sharing of experiences and problems and, in those countries where the government granted subsidies towards costs, the need for presenting a united front in making annual requests for funding.

The idea of cooperating in order to discover a corporate sense of priorities at a national level, and of actually subordinating local institutional ambitions to collective priorities, is of recent growth. Unfortunately, it is still relatively rare. In most countries the churches still operate vis-à-vis the public sector on the basis of "we and they". In some, the "we and they" may even refer to other churches. This lack of cooperation may be due to a fear of loss of identity or because of concern that one church's particular motivation for undertaking health care programmes might be weakened by intimate contact with others who are conceived as having different motivations. It may be due to suspicion arising out of centuries of mistrust, for it was not many years ago that some churches chose to compete with each other. The fact that one church was already operating a hospital did not deter another from building one nearby. There is one small town in a developing country where two Protestant hospitals were separated by a thin wall and each tried to outdo the other, depending largely on the popularity of the surgeon each was able to recruit. Fortunately, those days appear to be over. Nevertheless, cooperation at the level we are suggesting is still the exception rather than the rule and only in 7 countries, 6 of which are in Africa, has it been achieved, while in 17 others it is at varying levels with some showing hopeful signs of achieving full coordination of their programmes.*The fact that all the churches can and do cooperate fully in some countries, while the same churches are reluctant to do so in others, would suggest that doctrinal differences are less of a stumbling block than the human factors and personalities involved.

The Rationale for Inter-church Cooperation and Coordination

Why should cooperation be so necessary? It is fanciful to suggest that it should be an end in itself. Rather is it the desperate need of millions who have no access to health care, especially in the lesser developed countries, and who might be served if an attempt were made to coordinate the use of existing facilities as a first step in the process of designing a network of low-cost facilities that would reach the under-served where they are. It is estimated that the present facilities of governments and churches together now reach no more than 20 per cent of the populations in lesser developed countries. In such a situation, no church-related institution has the right to design its own priorities. It has a moral obligation to see itself in the context of a national need, that the millions now deprived might be served. It may well be that the particular form which the individual institution takes adds to the disparity between those served and those deprived. There is one instance where a small general hospital was converted into a cardiovascular clinic to satisfy the special clinical interests of the doctor who was assigned to it!

A further reason is that no one church alone can any longer afford to operate its own institutions. The cost of hospital-centred care has risen rapidly in each of the past 20 years. It has risen far more

* These statistics refer to the situation in 1975. National Coordinating Agencies for Church-related Health Services currently (April 1979) number 11 in Africa, 4 in Asia, 1 in the Estern Pacific, and 2 in Latin America. In addition, Protestant and Roman Catholic church-related health services are coordinated separately in 4 other African countries.

rapidly than the per capita income of the people to be served. Whenever hospitals have to rely on patient fees to recover costs, the gap between what they must charge and what the patient can afford to pay grows wider each year. When churches can bear each other's burdens by sharing some of these costs and by secondment of personnel, it is possible to make more effective use of the limited resources that are available.

The Malawi Experience

While much of the above might be discounted as theory, even with the prestigious support of the Executive Board of the World Health Organization, as will be documented later, nevertheless, the actual experience of those national coordinating and planning agencies which have attempted this level of cooperation is a convincing argument that it works to the benefit of those in need. The first such began in Malawi in 1965. It happened almost by accident. The National Council of Churches in Malawi had requested the World Council of Churches to send someone to survey the health care programmes of its member churches and to report on their relevance both as an activity of the church and a response to needs. What began as an exercise limited to the Protestant churches quickly became ecumenical when the surveyor was asked by a Catholic Bishop if he would include their institutions in his study. With the approval of the National Council of Churches, he did so. The survey began with an examination of the government's development plan for health services. There was no reference to church-related programmes in it, even though they constituted 40 per cent of the existing facilities. The reason for this omission is not as strange as it may appear. There were 26 church-related organizations operating these institutions and they had no common voice. As the Life President of Malawi expressed it, "They are all playing in their own back yards and they never look over the wall." In such a situation, planning is impossible. At the conclusion of the survey, those whose institutions had been examined were asked to assemble to hear the results of the study and its recommendations. The first of these was that they disregard the labels on their doors because they never cured anybody but tended to inhibit dialogue, and that they should form an association to coordinate their activities and engage in joint planning amongst themselves and, collectively, with government. This they did and the association has been housed within the Ministry of Health since 1966.

There were many convincing arguments for coordination. The government had raised the requirements for nurse education and no one church alone could meet them. One hospital had independently started a training programme for laboratory technicians, while the hospital of another church, 60 kilometres away, had heard nothing of it, even though its own laboratory facilities and personnel were woefully inadequate. Still another institution had an excellent programme for training physiotherapists but trained only its own, whilst the government and the other churches were in desperate need of such personnel. Through this new association, the churches resolved to carry out the following objectives:

1. To develop the highest level and distribution of health care through mutual cooperation of all the members.
2. To facilitate cooperation with the government's Department of Health and Medical Services and to speak as the official voice of the private sector in liaison with the Malawi Government for the furtherance of programmes, which shall be constructively related to the government's health services.
3. To develop and coordinate training programmes appropriate to the health needs of the country.
4. To engage in regional planning.

Much of the work is done in small committees, each of which has government representation. Thus, there are committees for public health, training, nursing, material aid, new projects and priorities, and administration. No new projects are supported unless they are screened and approved by the group as a whole and have government approval.

While the initial focus of activity was centred on the development of uniform administrative practices and a sharing of personnel for more effective programmes, this shifted into a broader concern with public health activities and outreach programmes beginning in 1968. Malawi, with a population of approximately 4 1/2 million, has one of the lowest per capita incomes in Africa, and expenditure on health care fails to reach the total population. A concern to correct this situation has occupied the attention of both the Government and the Private Hospital Association of Malawi, but the latter, representing the private sector, has a greater flexibility to develop innovative programmes. It began by placing the highest priority on the development of community health and fully integrated preventive services. At the beginning of 1968, the committee on public health decided to concentrate on the development of Under-Fives' Clinics, which would reach the larger population of mothers and children, not normally seen in the outpatient departments of hospitals. It obtained printed weight charts from Kenya and began training programmes for middle-level health workers to staff these clinics. Within a few months of the inauguration of this programme, the Ministry of Health started a similar development and weight charts are now printed for both sectors at the government press in Malawi. It is estimated that 35 per cent of Malawi's child population under 5 years of age is seen at least once in such a clinic, where

their weights are checked, they are vaccinated against smallpox and the majority are given DPT and polio immunizations as well as BCG. Mothers are introduced to health education and nutritional advice including a practical cooking demonstration. Some of the integration and the scope of this new interest in preventive measures can be seen from the increase in immunizations in the private sector: from 29,735 in 1967 to 234,283 in 1972.

In contrast to other countries where the private sector continues to develop hospitals as the focus of health care, the Association in Malawi has added only one new hospital and upgraded a few existing ones. Primary attention is given to the establishment of rural clinics and nutritional rehabilitation units. It has pioneered in pre-school feeding programmes, the publication of health education literature, and in the development of refresher courses for rural health workers. Dental prophylactic programmes were started in the northern region in Malawi under the direction of a Canadian dentist supported by the United Church of Canada and based at a Catholic hospital operated by the Medical Missionaries of Mary from Ireland. This programme has now been introduced in 3 other areas.

A further advantage of coordination in the private sector has been the development of integrated health facilities across what were previously denominational barriers. Thus, dispensaries and clinics are now related to hospitals for supervision and referral services and the determination of which relates to what is based on convenience, geographical factors and population densities. Because of the growing cooperation between the government and the private sector, this integration of services may soon extend to the national level. In fact, the present overall development plan for health services in Malawi, proposed by WHO in 1971, called for such integration. The Private Hospital Association of Malawi is represented on the government planning committee, which seeks to implement the proposal. Yet, in all these activities, the identity of each institution and its relationship to its "founding fathers" has never been lost. In addition to the above activities, the secretariat of the Association has centralized drug, equipment, and supply purchasing for all its members. It also recruits personnel from overseas and conducts an orientation programme for them. Training programmes for nurses, medical assistants and laboratory assistants are coordinated under one central committee with government representation. This coordinated programme immediately appealed to a large group of doctors in Canada who were looking for areas of service in Africa. Their previous experience had brought them only into association with isolated church or government programmes. Now they find that their relationship to a coordinated system of church-related health care programmes offers them the most relevant and useful distribution of their services and their placement within the country enables them to render a more effective service than hitherto.

The Malawi experience has shown that cooperation amongst the churches has inevitably led to a more responsible awareness of national health needs, reaching beyond a preoccupation with individual institutional problems. The private sector in lesser developed countries has too often worked on the assumption that the prevention of disease and the promotion of health are the exclusive responsibility of the government. This is understandable when national health care systems are inappropriately modelled on Western countries and much of the private sector was, and in Africa, still is, under expatriate direction. Therefore, it is of special significance that the national coordinating and planning agencies for the private sector are now giving the highest priority to integrated programmes designed to bring more effective health care to the maximum number in the population. In the case of Malawi, the complete cooperation of the government has been most effective in achieving a level of coordination of health service programmes at both the local and national level. It has also benefited from the arrangement, since it now deals with one organization housed in its own Ministry and representing more than 150 separate units.

The Experience in Other Countries

In India, coordination has taken a different turn. Initial efforts to bring the Christian Medical Association of India (Protestant) and the Catholic Hospital Association together were not successful, although they took the timid step of having representatives at each other's meetings. In 1969, a new organization was formed, the Coordinating Agency for Health Planning, which hoped to serve as a catalyst in bringing the 2 groups together. It went even further than that, and organized in most of the states a Voluntary Health Association, which is open to all members of the private sector, including Hindus and Moslems. In 1974, the various state associations formed the Voluntary Health Association of India at the national level, and the Coordinating Agency for Health Planning is now submerging its identity in the larger body and serving as its administrative arm. One cannot resist the idea that this may be a truer representation of incarnational theology or of the parable of the seed which was cast into the earth and died (in its identity as a seed) in order to become a great tree.

In Papua New Guinea, the churches fully participated with the government in the development of a new national health plan where each institution and programme was seen in its relationship to a national network of facilities covering the total population. Here, each facility and its personnel are part of a national effort to bring health care to all. A few

tentative efforts towards a similar goal are being tried in Tanzania and Ghana. In the former, some church-related hospitals are serving as district hospitals and are so designated by the government. In Ghana, a church-related institution serves as the supervisory and referral base for government health posts.

These, then, are illustrations of what is happening in a few places. Perhaps those who read this can find the reasons why it cannot operate in the countries familiar to them, and then weigh those reasons against the obvious advantages, the greatest of which is that more people in need of health care could be served.

COOPERATION BETWEEN CHURCHES AND GOVERNMENTS IN HEALTH PLANNING

A major theme of the World Health Organization since January 1972 has been the promotion of basic health services. It has been largely through the development of this programme that the CMC and WHO have located the basis for a greater liaison.

In one of its working papers on this subject (EB51/WP/1), the Executive Board of the WHO presented a forceful formulation of the argument for coordination of all sectors of health work, and particularly for the integration of private and voluntary agency efforts into the governmental health programme. The paragraphs that follow are excerpted from the conclusions drawn in this paper.

"While health services in countries have international significance (as disease can be an international threat) their primary purpose is national. It may be considered that health decisions are an individual or personal matter, but in practice, owing to the complexities and expense of health service actions, they cannot be carried out effectively and efficiently except by groups pooling their resources. For the most part these groups must be national, even though, in order to ease administration or to increase adaptation to local needs and wishes, the executive actions of a health service may be regional, provincial or local.

"The distinction between, on the one hand, the national responsibilities for stating national goals, evolving a standard health technology, and allocating resources within the national scene, and for the common use of research, training and specialized institutions, and, on the other hand, the control, configuration and administration of the services at the periphery by the consumers themselves, is a source of major confusion and error. In the Board's view, the differences between urban and rural societies, between different regional and ethnic groups, and between persons with different ways of living and values, make it essential that the interface between the consumer and the health service be influenced by the consumer and that the accepted pattern serve the needs of both the health services and the consumer. This has no disadvantage in terms of national policies and has enormous advantages as it can result in the tapping of local resources for health service purposes, make medicine, 'belong' to those whom it should serve, and encourage innovation and experiment in a place within the health services that matters. The dividing line between national and local responsibility has never been adequately described. The assignment of these different responsibilities can result in insecurity and questions of control. However, the Board considers that a structuring of responsibilities within the health services which gives greater emphasis to consumer preferences need not detract it any way from the primary principle that health services must be thought of and planned as a coherent whole. Yet it seems an essential core question which must be faced and goes many steps further than the support of a decentralized federal structure in a large country.

"While the reasons for developing a health service on a national basis may include economic and other factors, most successful examples have been put forward and administered to express a population's demand for social welfare and justice. For this need to be met effectively it should be expressed in terms which can be called 'outputs' and which will indicate the final return to the individual in health status and in service. The protection and rights of personnel within the health service need to be removed from the consideration of this national will, and dealt with quite independently as a separate question.

"Most health services authorities appear to give only token recognition to those segments of the services not under their financial or direct executive control. National health administrations often 'plan' for that part of the national budget which is said to be their responsibility; provincial or regional administrations frequently act similarly. This is often done even though a large or a major part of health expenditures may be made directly by the individual, and not through prepayment or taxation. The same comment could be made about assistance from bilateral or multilateral agencies, including WHO, to countries. The actions are based upon what this or that body considers that it has the authority, resources or mandate to do, rather than upon the needs of the health services taken as a whole. This fragmentation 'appears' justifiable, as it is difficult to make decisions upon matters not directly under executive control, and it may appear a harmless and innocent distortion to support one or other action in a way unrelated to the whole. However, the Board considers it unjustifiable and harmful and that some of the present health service dysfunctions are the result of such thinking. The health service

must be taken as a whole: public and private; national and international; curative and preventive; peripheral, intermediate and central.

"The interaction between the public (largely government-or tax-supported) segment of the health services and the remainder of the health care system (supported by special groups or by individual payment) is not properly understood in most countries. The non-public sector includes persons and institutions of different levels of skills ranging from the specialized hospital to the private general practitioner, the pharmacist, the village midwife, or even the local healer. It also includes persons who are supported completely by individual payments, part-time workers who may be also employed by the public sector, or even persons who have only a fringe or occasional involvement in health. All these are part of the health care system, even though the role that some of these individuals play may not be accepted as important or essential within the present view of health service practice.

"The Board considers that the health services are missing real opportunities by not taking advantage of the resources in money, manpower and local organization that already exist and that could be channelled to further proper national health service goals. Their strength lies in their present acceptance by the populations, their local control, and the proportion of family and community income already assigned to health by individual decisions. Their weakness lies in confused goals and poor expression in terms of health technology, and in the lack of contact or relationship with the official health service structure. These weaknesses can be resolved.

"The present position is bad but it is not unchangeable. It does not appear to be getting better and without change it is likely to become worse. Minor changes in detail will not bring about correction. Coverage can be increased or doubled, but if the present coverage rate is one per cent, a doubling is meaningless. Administrative change of 'vertical services' to 'horizontal ones' will not attack the important defects. A decrease of the numbers of hours spent upon anatomy and their replacement by the equivalent number of hours of community medicine in the field may not be sufficient to change a doctor's thinking and actions radically enough in later life to change the system. The need is to deal with the key features of the wider picture, rather than to make important but circumscribed reforms."

THE THIRD CONFERENCE FOR COORDINATORS OF CHURCH-RELATED HEALTH WORK IN AFRICA, MOMBASA, 18-21 FEBRUARY 1975

The Christian Medical Commission had, on 2 previous occasions, called together the individuals concerned with coordinating church-related health work in Africa. The first gathering was held in Limuru, Kenya, in February 1970 in conjunction with a conference on "The Healing Ministry of the Church". Those delegates specifically related to the Coordinators' Conference included 18 representatives from 12 African countries.

The Second Coordinators' Conference took place at Blantyre, Malawi, in February 1972 in collaboration with the Private Hospital Association of Malawi and the Government of Malawi through the Ministry of Health and Community Development. The list of participants included members of the Government of Malawi, members of coordinating agencies from 14 countries of Africa, and special invited guests from donor and international agencies.

This third conference, which we are reporting here, represented a gathering of health workers and coordinators from 15 African nations as well as guests from funding and other international agencies. Broadly conceived, the intent of this conference was to discover the most urgent health care priorities for the churches, to examine the planning process for these, and to see how coordination contributes to this. To get at this in a concrete fashion, an agenda was proposed that included these 3 main topics:

1. the integration of all church-related health care programmes in national health planning;
2. the potentials within each country for development of primary health care projects as the highest priority;
3. the detailed implications of localization of staff at the senior level in both coordinating agencies and in the direction of programmes.

The first day's discussion focused on the subject of the integration of church health programmes into national health planning. The term "integration" was understood to mean the inclusion at the planning level of church-related resources and programmes into a unified national health care scheme. It was generally agreed as essential for all health services, public and private, to recognize the harmful and fragmented state of affairs now in effect. It was stressed as urgent that government and church health planners should adopt a comprehensive approach to all aspects of health provision, including public and private agencies, curative and preventive services, technical and promotive efforts, with the application of all of these to the outlying communities as well as central health institutions.

Constraints to Coordination

Recognizing the need for this kind of coordination and integration, the conference pointed to many of the factors which now frustrate progress in this area.

These constraints can be grouped in the following way:

1. Constraints within the churches

   a. The Theological Identity Crisis: Church leaders fear that with coordination and integration, the autonomy of church administration and control of programmes will be lost. There is a major concern for the preservation of the special compassion that is thought to characterize Christian health work.

   b. The Tribal Identity Crisis: Tribal consciousness continues to be a significant influence within certain countries and has offered a restraining influence on the process of integration in those areas.

   c. The persistence of independent planning and programme development, as well as independent approaches to government and donor agencies, even among those church programmes already relating to a coordinating agency, is a serious frustration to integration.

2. Constraints within government

   a. The lack of a national will to integrate or include the private sector in its planning.

   b. The relatively frequent changes of personnel and policy direction within governments.

   c. Political instability and upheaval.

3. Constraints within the health bureaucracy, in the government and the private sector

   a. The lack of a sound health personnel policy in ministries of health and in the planning of the churches perpetuates the imbalance in the training of doctors and the training of frontline health workers. This has delayed the development of auxiliary training programmes in many countries.

   b. The curative and hospital orientation of the average health professional remains an obstinate constraint. The pride in the big institutions has spread to the administrative offices in both sectors.

   c. The lack of community participation in identifying needs, forming objectives, or shaping plans, is seen more and more as a serious omission in health planning. This is true largely because the health bureaucracy cannot believe that the community has relevant perceptions regarding its own health care.

4. The constraint of personality

   The dependence of the entire integration process on the personalities of decision makers in the church, the medical profession and the government, for good or bad, is a reality that lies behind the success or failure of many programmes.

The conference urged that each of these points should be examined honestly by health planners, and weighed against the fact that millions of people who are now deprived might be served. No longer can indifference to the suffering of these unserved millions, no longer can our callous disregard of their plight, be allowed to masquerade as uncompromising ethics, devotion to our institutions and their good standards, or the misdirected conviction that it is our Christian institutions that offer that special kind of care and compassion in the name of Christ. In fact, it is people, caring Christians and the redeeming community, that give expression to this compassion. For church health programmes, the only option is loving, intelligently planned care which is rendered to the millions now deprived, as well as those for whom it is already available. Integration of all health services is one of the keys to this kind of planning.

The Development of Primary Health Care as the Highest Priority

In the discussion about developing primary health care services, certain axioms were offered as guidelines to this process.

AXIOM 1: The provision of even basic health services is met with minimum effect, unless you provide the community with a reasonably sanitary environment, adequate nutrition, good water and the like. Primary health care must be evolved within the fabric of a total interdisciplinary approach to community development.

AXIOM 2: Designs for health programmes will not take root if they are designed for people instead of by them. Communities must first be involved by soliciting from them a declaration of their felt and expressed needs, and the priorities which are assigned to these needs. Involvement of the community in the planning and decision-making process allows health care to be an expression of the community caring for itself, instead of imposing a system from the outside that may well not meet the needs at all,

AXIOM 3: Provision of health care is more acceptable to the people if it is brought by persons selected by the community, out of the community, and who remain an integrated part of the community throughout their training and work. The training and utilization of primary health care workers is a concept that is emerging as essential in primary health care schemes.

AXIOM 4: Even without medical intervention, there is a potential for health promotion and improvement within the community that needs to be nurtured and released. This proves to be more valuable than the distant promise of medical care to be "delivered" and to which we feel "entitled". It is in this light that the church as a healing community

must seek to find a fuller expression, in order to extend the hand of compassion as the caring community.

Once the premise is accepted that the development of primary health care is of the highest priority, the planning must begin. Engaging in this planning is as essential for those with extensive and established programmes as it is for those who are initiating new work in an unserved area.

The process of such a planning exercise should follow a number of well-established phases and steps. The scheme presented here is one which draws on planning documents of the WHO and UNICEF as well as CMC formulations.

As the first phase, the gathering of information should cover certain points:

1. The target population must be identified and described, its perimeters and stability known, and its characteristics appreciated.
2. The epidemiological features must be known for the area.
3. The basic health needs for this population must be ascertained, as expressed by the people served, certainly, and also as perceived by the church and government health planners.
4. The resources to support the health effort must be determined and their expectations realistically known, at the local level as well as at regional and national level.

With this data as background, it should be possible to set a number of goals and objectives for the programme:

1. In contrast to the meagre 20 per cent of rural, slum or remote populations that now have access to health care services, the objective of providing coverage for 80 per cent of these populations would seem reasonable.
2. The programme should be capable of application within a reasonable span of time, and in full recognition of the limited resources available.
3. The development of a promising programme need not provide all the planned-for elements and activities from the outset. However, growth to the full programme could be deliberately planned and achieved as a gradual process.
4. As a response to the data accumulated in the first phase, specific health improvement objectives should be set out, expressed in terms of percentage change in health indices or other parameters of expectation. These should be reasonable in number and feasible in terms of the resources available.

The activities and programmes of the primary health care system that are designed to approach the objectives set out above will ideally include most of the following:

1. Adequate immunization.
2. Assistance to families during pregnancy and at delivery; postnatal care; advice and assistance in family planning; child care ("under-fives").
3. Safe, sufficient and accessible water; adequate sanitation; vector control.
4. Health and nutrition education, including the stimulation of methods of providing adequate nutrition.
5. Diagnosis and treatment of simple diseases; first-aid and emergency treatment; facilities for the referral of serious conditons.
6. Other services that may be relevant to local conditions and health attitudes and aspirations.

The implementation of these programmes requires decision making in several areas:

1. How the services are provided at each level; the health care facilities needed, their location and type and size; the schedule of activities at each facility and equipment needed.
2. The personnel required for these services; the specific workers required for each task and facility (auxiliaries, nurses, midwives, doctors, sanitarians, traditional practitioners and attendants and the like); the selection, training, responsibility and supervision of each.
3. The structure of supporting services at intermediate, secondary and national levels; the way that each of these supports the coverage at the frontline; communication, ongoing training, supply logistics, referral procedures; relationship of the local efforts to national health planning, preventive programmes and general community development.
4. Ways and levels of community involvement in health-related development work, planning for health projects and promotion, and in the financing and control of the health services.

The Localization of Top-Level Administrative Staff in Church-Related Health Programmes

The realities of present cross-cultural attitudes have brought a good deal of pressure to bear on the movement for localization. The reasons in support of this argument are many. First of all, nationalization, or localization, allows the churches to make maximum use of all the human resources available for action. National leaders are indeed the most appropriate persons to carry on projects within their own country, from every point of view. Second, the expatriate is by far the most expensive way to run

any project or hospital. Third, the double standards for salary, conduct, and patterns of work, which will persist as long as expatriates and nationals work side by side under different contractual relationships, foster misunderstandings and ineffectiveness on the part of the expatriate. Fourth, the continued direction of programmes by expatriates perpetuates the inappropriate aspects of these programmes and prevents them from becoming an expression of the community's intent. Fifth, the continuing influx of foreign resources, including personnel, finances, and institutions, is frustrating the progress of the African churches' desire to move ahead in the way of true self-expression.

The discussion on these topics was intense and lively. There was a strong concern on the part of many that our fine institutions with their high standards are often not "serving" the people nor meeting their real needs. Many were eager to critically re-examine the health programmes of the churches they represented in the light of national and district health planning and the needs of the total populations in their areas. It was apparent from the reports of the various countries that integration was becoming a reality in a number of them, that independent and non-community-related programme development was being discouraged.

At the same time, it was also seen that the concept of coordination was finding expression in some nations as a means to perpetuate the status quo, to dignify the financially voracious institutions with the cloak of integration. Some of the churches' medical administrators seem to be utilizing the structures of inter-church cooperation and coordination as little more than a clearing house for grant applications, improved supply logistics and visa procurement.

It is hoped that higher motivations and purpose will come to characterize coordination in all countries, so that health promotion is closely integrated with the life and mission of the church, and health care programmes become the manifestation of congregations exercising their healing ministry.

POSITION PAPER: DECLARATION OF THE AFRICAN COORDINATORS' CONFERENCE

I. Localization of Personnel (Coordinators) of The National Coordinating Agencies

A. It is imperative that African counterparts for the post of Coordinator (where the Coordinator is not now an African) be recruited within one year. The orientation and training of this person should be complete and turnover accomplished within 3 years.

B. The participation of the church leaders should be secured in the selection and appointment. Where guidelines are present in existing constitutions, these will dictate the process and nature of the appointment. Where clear job descriptions do not exist, these should be drawn up.

C. While experience in health planning or health care would be highly desirable, as would experience in development planning or administration, the Coordinator might be recruited from other fields, such as education, social work, management or administration. He/she may be sought from the ranks of church workers, but might also be found in the private sector or government service.

D. Once recruited, the Coordinator should receive in-service training. In addition, the Christian Medical Commission could be responsible for providing further training and/or experience as befits the particular person.

II. Statement With Regard To Existing Hospitals

The present system of operating church-related hospitals, particularly the larger ones, has put them in a very vulnerable position. Operational budgets have increased sharply, especially in the category of staff salaries. They depend on expatriate personnel, salaried from outside sources, for many senior staff positions; localization of these positions will add enormously to the operational deficit. Church proprietors are unable to assist materially to relieve this financial strain. The pressure to increase the already burdensome and discriminatory patient-fee structure is severe. The balance which used to be possible between budgetary demands and patient fees no longer exists. Moreover, grave doubts about the end-effectiveness of hospital-centred medical care are being raised. The situation now demands an urgent change in policy.

Several courses of action may be open to the local churches. The option chosen should reflect a desire to promote the integration of our hospitals into the national health structure. It should also affirm the belief that hospitals are a necessary adjunct of primary health care programmes.

OPTION 1 The hospitals may be refashioned to come within the scope of locally available funds and personnel.

OPTION 2 A policy of partnership with government may be pursued, such as that seen in the "combined hospital" concept, under which the government provides the running cost of the hospitals, including the salaries of national staff which replace expatriate staff.

OPTION 3 These institutions may be handed over to government in a phased programme

with the approval of external supporting partner and the local church.

OPTION 4 Until one of the above can be accomplished, increased support may have to be sought from overseas societies and church agencies – support which is adequate to relieve the burdensome structure.

With regard to this last option, the conference participants noted that the likelihood of substantial increases in the current level of support from overseas agencies was not very high.

III. Statement With Regard To Future Health Programmes

Many factors compel a careful examination of the objectives of current and future church health programmes. Financially, hospital-oriented health care programmes are becoming untenable, both to the supporting church bodies and to the patient populations. Limited resources are the economic reality and framework of all church programme development. Moreover, the vast majority of African peoples are now deprived of all health care by virtue of financial, logistical and cultural constraints. These millions will simply never be reached unless a new orientation is achieved in the churches' health planning. Clearly, then, the highest priority must be placed on using available resources to provide for primary health care, meeting basic needs within the community. In the implementation of such a policy, the following points should be observed:

A. Health programme development must focus on the community rather than the institution.

B. Involved health professionals and church leaders need reorientation to concepts of community health programmes.

C. Primary health care programmes should be low-cost in running expenses and, therefore, locally sustainable.

D. This new policy direction should be seen as a joint endeavour with government, and efforts should be made to sensitize those within government medical services as well to the imperative necessity of primary health care planning.

E. Health auxiliaries fill a key role in primary health care. These are individuals, chosen by their communities to be trained as primary health care workers, to carry out health programmes which meet the communities' expressed needs.

F. Where government does not approve of the utilization of such level health workers, modifications might be made in auxiliary-level training to conform to government policy. In addition, catechist, evangelist and lay training programmes should include aspects of basic health promotion. Consideration could also be given to training traditional healers and midwives to be incorporated into the primary health care system.

CHAPTER VIII

IS PRIMARY HEALTH CARE THE NEW PRIORITY? YES, BUT...

by Dr Charles Elliott

This paper was presented by Dr Elliott at the Annual Meeting of the Christian Medical Commission held in July 1975 in Zürich. Its aim was to offer a critical look at the 7 basic principles of the World Health Organization's approach to the promotion of primary health care. The paper was then reproduced as CONTACT 28, August 1975.

ELEMENTS OF CHANGE

It is probably more dangerous to read history forwards than it is to read it backwards, but there can be little doubt that, when health historians come to chronicle innovations in medical care achieved in the seventies, they will put great emphasis on what we have come to call by the umbrella title of "primary health care" (PHC) or "community care".

In a variety of planning instruments in many countries of the world, we can see reflected a recognition of the fact that, in the past, health care has been regressively distributed, with the result that the great majority of mankind are allowed to suffer diseases, disabilities and deprivations which the world community as a whole has the skill and resources to relieve. In order to focus more clearly the later and more contentious parts of this paper, it may be worth sketching out 5 areas in which the "centre of gravity" seems to be moving rapidly and which, taken together, constitute the elements of the new health strategy.

The most obvious element is the wider use of paraprofessional personnel as "frontline workers" who can better bridge the cultural gap between the healer and the healed. Less highly trained, this category of worker can nevertheless deal with the major treatable diseases in his/her locality, administer first aid and carry out simple (but often very effective) measures of preventive medicine. Recruited in greater numbers than more highly trained workers could possibly be, these paraprofessionals supply a greater "cover" of the population with primary care: secondary care is assured (in theory) by a referral service to more sophisticated units.

A second element is the relative downgrading of curative services and a *relative upgrading of preventive services.* Although there is a growing awareness of the interdependence of prevention and cure, (both technical interdependence in terms of acceptability), preventive medicine is decreasingly the slumland of the medical townscape. Partly as cause and partly as effect, health planners can now accept that much wider issues than the narrowly medical impinge upon preventive services. That brings us to the third element.

This is the gradual metamorphosis of traditional vertical programmes, centring on one disease or cluster of diseases, with a central directorate and a programme-specific field staff, to a much *more integrated approach*. This integration is beginning to transcend medical boundaries, so that we have seen in the last 5 years a double jump from highly specific vertical programmes within the ministry of health to, first, integrated programmes with prime emphasis on prevention rather than detection and cure; and then a second jump to integrating the specifically medical service with programmes from the ministries of agriculture, public works, housing and transport, into programmes of genuinely (rather than cosmetically) integrated rural development.

That raises a fourth element: the shift of the spatial focus of health care from the densely settled urban areas, which offer all the benefits of cost-effectiveness, to the less densely settled and usually much less prosperous rural areas where the objective need may be greater but the costs of programme implementation are very high. I put it in these rather formal economic and technocratic terms because I think it is important to emphasize that the urban bias of health services had a logic (if a perverted logic) of its own. It did not result only from a wicked oligarchic plot to hog the largest share of the medical cake, (which is a picture that some more incautious left-wing critics tend to imply), but from an uncritical application of (basically Western) economizing algorithms to a situation of extreme resource scarcity. If medical facilities of all sorts are in desperately short supply, it is neither wicked nor foolish to deploy them where they are most likely to be used. That resources take the "wrong" form is a quite separate argument – though obviously a very

important one – which historically came on to the agenda much later. The dethronement of cost-effectiveness and efficiency represents a remarkable "political" change, the more remarkable because it does not seem to fit any preconceived notion of the ideological commitment of governments.

The last element is in some ways analogous to the preceding ones. As there has been a political decision to jettison cost-effectiveness criteria in the health programme overall, (though such criteria may still be used at a highly disaggregated or micro level), so there has been an increasing readiness to take back on board at least parts of "traditional" healing systems. There is little evidence of Western technology being jettisoned, (which is probably right); but there is quite a lot of evidence of a more serious approach to the daunting task of fusing Western technology with both traditional technology and traditional delivery systems.

Here, then, are 5 elements of change. To change the metaphor, we can think of each of them as a spectrum along which individual countries move at different paces and in response to various stimuli. There is no reason why progress along one spectrum should be at the same speed as progress along another spectrum. For instance, a country may go much faster in its switch from a curative bias to a preventive bias than it goes in its switch from a purely Western medical technology to a Western-cum-traditional technology. At this moment, then, we see a very wide range of practice. The one uniform feature is that there does seem to be in very many countries movement (or preparation for movement) along one or more of the spectra. Put the other way, I personnally know of no significant evidence that any country is moving in the reverse direction, except perhaps as a temporary adjustment to acknowledged failure in a hitherto unexplored band of the spectrum. The almost universal experience of this progression (or readiness to progress) along the spectra is reflected in the deliberations of the World Health Organization and particularly in the main thrust of its programmes as agreed at the last Assembly.

THE NEED TO REDEFINE THE GOALS OF HEALTH CARE

The ball seems to be rolling then. And if the CMC played a part in giving it the initial kick, I hope it seems neither ungracious nor ingratiate to use this platform to ask 3 fairly difficult questions about the terrain in which the ball is now rolling. To stick with this metaphor a moment longer, I think we have all seen the goal fairly clearly from a distance and, (as is most effective on the football field), we have kept our eyes on the ball rather than on the goal. But, as the ball begins to travel towards the goal-mouth, it becomes increasingly appropriate to focus more precisely upon the goal. To anticipate the argument rather crudely, I am going to suggest that the goal is not quite what we thought it was; or, conversely, that if it was what we thought it was, then the ball is not going in the right direction. This, of course, is very embarrassing for us all. It implies that we have mis-specified the goal and, therefore, that we have a great deal more definitional work and strategy planning to do, just when we thought we were through with all that. Further, it raises the difficult and potentially contentious suggestion that some of us who hitherto have been playing on the same side with increasingly sophisticated teamwork may, in fact, find (because of our ideological colours) that we are kicking towards 2 very different goals: goals which do not coincide as closely as appeared when viewed from a distance. Again, back to the tedious business of defining the objective, but this time more acutely aware of the wider philosophical/ideological/political ramifications of that process.

Let me focus the issue by putting a straight question:

Has the new emphasis of the democratization of health care become no more than a new form of professional domination?

I do not seek to answer that question dogmatically. But I do want to suggest 5 areas of evidence which make the question worth asking; and perhaps make it worth asking with the expectation that the answer will be yes.

(a) The first area of evidence that I think is crucially important is the increasing evidence that comes from rural sociological and economic studies (practically worldwide) that the *priority accorded to health care by villagers is under most conditions rather low.* I say, "under most conditions", because clearly there are occasions – e.g., a measles epidemic – when the morbidity and mortality rates rise so much above those that are commonly accepted as the norm that health care is temporarily shifted up the scale of priorities. But it is almost certainly shifted down again once the immediate crisis is past.

Although I do not pretend to have made a very scientific study of this, my hunch, based on a reading of a fair wedge of empirical work mostly in Asia and Africa, is that the priority accorded to health care varies directly with the "level of development" of the community. The higher the general level of education; the higher the general level of income (as a proportion of the average wage in the modern sector); the greater exposure to mass media; the greater the aggregate urban experience of the community; the more sophisticated the lifestyle of the community; the higher priority is accorded to health care in both preventive and curative aspects.

Now this means that communities that have traditionally been most poorly served are those that

accord health care a rather low priority in the demands on community resources. Typically, education, easier access to a reliable (and clean, though this is seldom made explicit) water supply and better marketing opportunities are usually accorded a far higher priority than health care.

This suggests that in delivering health care either unisectorally or multisectorally to these less developed areas, we are responding to criteria and judgements of need that may be entirely defensible in some sense, but which certainly is not *felt need.* This may already go some way towards explaining why many of these programmes have proved so difficult to implement. I do not want to pursue that line of argument here although, as we shall see, it is not entirely irrelevant to later points. The immediately relevant issue that needs emphasis is this: a community adjusts culturally and possibly physiologically to a certain pattern of disease. To be responsive and responsible, our health planning has to take account of that process of adjustment. If it fails to do so, not only is it unlikely to be practically successful but, at a much deeper level, it stands in danger of threatening the cultural values and, therefore, the cultural and social stability of the community whose health *in its deepest sense* it is seeking to improve. What is this but professional domination, the imposition of a set of values which have their origin in a professional caste but which are not shared by those on whom they are imposed?

(b) Let me now pass to a second area of evidence. When villagers are asked what kind of health care they need or desire, (2 very different concepts which are notoriously difficult to keep separate in the field), they typically make the "wrong" choices.

They say they want hospitals or larger clinics. They say they want a doctor in the village. They certainly show much more enthusiasm for Western curative medicine than for preventive medicine. In fact, they reflect their socio-medical conditioning almost embarrassingly well. Like ministries of health anywhere in the world, they show great reluctance to make the "hard" choices in the distribution of resources. If they see that sometimes a choice has to be made between saving one life or preventing 100 cases of gastroenteritis, they are unlikely to take it as *self-evident* that resources should be put into preventing 100 cases of gastroenteritis. Hierarchical social structures and status-based ascriptions of value may conflict head on with an egalitarian value system, possibly derived from a Judaeo-Christian origin. Which value system is to predominate? The local system (with its possibly very regressive distribution of resources) or the "professional" (with an attempt at an egalitarian distribution)? The basic PHC philosophy commits us to the latter; and therefore, the neglect and possible destruction of the former.

(c) If the balance of the empirical evidence is that our own ideology of health care is, in fact, not widely shared at the grassroots, there is also evidence that it is not widely shared by those most immediately concerned with its implementation. By this I do not mean the opposition from the medical profession. This was always to be expected; and if the conversion of (at least elements of) the profession has in fact been both quicker and less traumatic than we might reasonably have expected, that is not necessarily a case for jubilation. More worrying has been the evidence that frontline troops very quickly learn to aspire to become generals. With the wisdom of hindsight, it was perhaps naive to expect that we could fashion a new breed of frontline health workers who would be content to be just that for the rest of their days. Particularly was this the case if they were to be expected to earn their living by continuing their original occupations as farmers for much of their time, practising their semi-skill in health care on a part-time (and to some extent voluntary) basis. But even full-time, "adequately" paid frontline health workers are not usually latter-day St Francis of Assisi. Though they may identify with their patients in their natural habitat, the very process of the acquisition of the skill that by definition those patients do not have; the acquisition of status within the community; and contact with a much higher status group outside the local community together give them both inducement and appetite for differentiating themselves further from their patients.

I use this sociological jargon precisely in order to avoid seeming to pass judgement or to be wise after the event. Merely by reducing the skill level of the frontline workers and to some extent reducing their obvious identification with a largely alien "health service", one does not thereby give them the exceedingly high levels of altruism and selflessness required to remain in the job and on the job with no prospect of career or financial advancement.

Looking at the experiments that have been going on over the last 5 – 7 years, then, we find that one of the recurring problems in implementation is that of motivating and "making stick" the frontline workers. I am told that, even in China, it is becoming more common practice for the various types of frontline workers to become increasingly professionalized and highly (or at any rate less rudimentarily) trained: a possibly gloomy analogue to the experience in Ceylon with the assistant medical practitioners.

In what sense is this evidence of professional domination? It suggests that power in the profession is still in the hands of the higher echelons of the fully trained. It is not usually in the hands of the local community. Only in those (very few) countries in which there has been a determined and sustained effort to transfer power to the local

community is there an adequate counterweight to the centripetal force of the profession. To put it crudely, the PHC strategy *alone* is by no means an adequate attack on the structure of power within the profession.

(d) If neither the patients nor the medical workers have shown much enthusiasm for at least elements of our ideology, it is perhaps inevitable that an increasingly serious problem is that of the *quality of care.*

I realize that at this point I can be badly misunderstood, and indeed be transferred along the spectrum from medicine red to medicine blue, in Maurice King's now famous phrase. That is not my intention at all. I am *not* appealing at all for the maintenance of inappropriate standards. But I am concerned that we all fully appreciate that one reason why actual and potential patients sometimes like new models of health care no more than the old is because they associate them with a low quality of care, in both technical and human or personal terms. It is not fanciful to suggest that one reason why health care is given a low priority, particularly in rural areas, (and why unrealistic demands for "hospitals" are made when issues of health care are raised), is precisely because anything less is perceived as almost inevitably a medical shambles.

It may or may not be true that this is a short-run inevitability, analogous to the almost universal experience of declining educational standards during periods of extremely rapid growth in enrollment. But when diagnostic accuracy declines to (or perhaps remains at) less than 20%, it is debatable whether the cultural intrusion of Western or neo-Western standards and forms of medical care are worth the candle.

Are we absolutely certain that, seen in its widest social context, (which I think most of us would agree is much wider than the purely medico-scientific), low-quality care is to be preferred to the traditional systems of care that it seeks (either actively or passively) to displace?

Let me be clear at this point. I am not arguing that we must wait until a "high" quality of care can be guaranteed and distributed equitably before we invest any resources at all in PHC. I am arguing rather that we at least need to ask whether an equivalent amount of resources invested in traditional types of health care – e.g., in upgrading "village midwives" or extending the range of a herbalist's stock of remedies by the inclusion of non-local or even imported remedies – would not have a greater impact on the level of morbidity and mortality than a (highly inefficient) "scientific" health care system. Obviously, much depends on how effectively the traditional sector could be mobilized for preventive work. My suggestion is that the probability that it could be no less effective than the "modern" sector is sufficiently high to make more vigorous investigation worthwhile. But, hardly surprisingly, the modern sector has consistently resisted such investigation.

(e) The fifth issue can be raised rather more briefly. One of the major forces behind the PHC emphasis has been the observation that many common diseases are widespread or even nearly universal in populations largely untouched by "modern" medicine. But we have recently acquired evidence that communities adjust to these levels of disease, or at least some of them, culturally, socially and, to a small number, physically. Certainly, a team with which I worked in Zambia was unable to find any compelling evidence of the impact of parasitic diseases on agricultural effort or school performance. Interestingly, an American team under Weisbrod has recently produced directly corroborative evidence from St Lucia. Let me emphasize again that neither study is wholly satisfactory methodologically. The complexity of the issues, the difficulties of field work, the interrelations amongst the many variables that have to be observed or controlled make detection unsually difficult. But it is surely beginning to look as though "health need" is, to put it at its lowest, a much more subtle concept than either health economists or medical sociologists have in the past generally believed. As Joyce Leeson has argued, "health need" cannot be defined purely in clinical terms; it has to take account of cultural and social variables: variables which health planners have not begun to identify, much less seriously respond to. Hitherto, the epidemiologist has been king; it is time he was dethroned. Let him now take his place in a Council of Equals in which seats will also be allocated to anthropologists, sociologists, and representatives of the sick and the healthy.

But if "health need" is so subtle a concept, what guarantees have we that the PHC strategy responds to this subtlety? In theory, the guarantee is that the local community is closely involved in the definition of health need and in the priorities of the provision of health care. But all depends on the form in which the dialogue is cast. If the choice before the community is the disposition of unearmarked resources, (that is, resources that are not ostensibly linked to "health" or "agriculture" or "water"), there is a fragile chance that this subtlety will be protected. But "community involvement in decision making" can easily become a charade in which the decisions are compressed into so narrow a focus that we have again to recognize patterns of domination (e.g., "Do you want the clinic here or there? Ten beds or twelve? Which do you want to tackle first – malaria or hookworm? ...").

We have here, then, 5 areas of evidence that I suggest we need to ponder rather carefully. To recap briefly, these are:

1. Local communities tend to give health care low priority.

2. They tend to make the "wrong" choices when given the opportunity to express their own preferences in terms of delivery systems: at an interpersonal level, they do not necessarily accept medical equality.

3. Community-based health strategies have proved extremely difficult to implement, partly (but only partly) because frontline workers are rapidly professionalized.

4. New health strategies may deliver health care to more people, but tend to deliver an extremely low quality of health care to the majority of those people.

5. We have probably overestimated the effects of disease on a community, and underestimated its cultural and possibly physical adaptability to a given burden of disease.

I have argued that each of these could provide evidence, (which I have deliberately not rehearsed in detail), that PHC strategy *alone* does not deliver us from the kind of professional domination we all associate with hospital-based curative services. This is *not,* not to say that PHC is a blind alley, or wrong or a mistake. Please let us be clear about that. It is to say that an overly naive espousal of PHC strategy, without a readiness to face deeper issues, is likely to result in bitter disappointment. For, to anticipate a moment, PHC strategy depends upon fallen humanity (both as healer and would-be-healed) and therefore upon fallen institutions. It, like everything else, is cast in an environment of original sin. This is a theme to which we must return. For the present let us limit the discussion to one central point.

The CMC and its many friends have been wholly justified in declaring war on the medical ideology of the middle sixties. The question I am asking is whether, in producing a substitute ideology, we are not in danger of doing the same violence to people and to communities, (though perhaps for higher motives), as did the people and institutions with which we have been struggling. Is there not a danger that the new set of ideas becomes as dominating, as dehumanized, as ultimately demonic as the old set of ideas? If we really seek to respond to the situation as it is, to respect the *whole personality* of the community and individuals within it, might we not come out with a very different set of assumptions, strategies and tactics; and might not those assumptions, strategies and tactics have very little, at least overtly, to do with what we have traditionally regarded as health care?

This takes me on to a new point, and a second hard question. The question can be put like this:

Is community health care as readily institutionalized as any other social service?

Precisely because the PHC emphasis has already become widely accepted, (if not yet widely implemented), there is surely a danger that it will suffer from a hardening of the administrative arteries and a blunting of sensitivity that will change it from a potential asset to a certain liability.

If one looks at the literature on community services in general, (and person-directed community services in the United States and the United Kingdom in particular), one is impressed by the ease with which *an institution subverts the end for which it was created as a means into a means by which its own end can be justified.* Within the last 6 years, many studies have revealed how, in our own Western countries, services that were established to deal with "the hard cases" have become extremely adept at developing administrative rules whereby the really hard cases are excluded, with the result that the service becomes available to the less hard, the more easily managed, the more administratively safe.

I see no reason to assume that this tendency is confined to one particular culture or one particular kind of organization. It seems to me to stem much more from the nature of fallen humanity and, when put together with the 5 bits of evidence I adduced for the first question, it does seem to me to suggest that even PHC stands in great danger of developing and institutionalized hierarchy of beneficiaries which will systematically exclude those who stand in the greatest need of health care, and in whose name the original moral impetus of PHC was generated.

This administrative distortion I see as an internal threat: it is parallelled and indeed aggravated by an external threat. That threat is the tendency for governments to see the provision of health care *as part of the process by which the government itself is legitimized.* To some extent, this is true of all social services; and to some extent, it is a proper and healthful response of government to popular pressure. The danger arises because different social groups are capable of threatening governments to different degrees. Different social groups can therefore demand different levels of tribute; and health care is one form that tribute can take. Put at its crudest, this tends to suggest that once PHC develops its own institutional momentum and its own administrative rigidities, we may well find that it is subject to the same distributional biases as was the curative, hospital-based, "undemocratic" structure of health care. Whenever and wherever there are resources to be distributed, they will be distributed in response to political pressures. The changing of the health package (in its widest sense) does not much affect that basic fact of political life.

Taken together, then, the internal and the external pressures on the community health care strategy will at the very least much moderate the effectiveness of

that strategy in reaching the poorest and the most powerless.

So far, I have asked questions about:

(a) the extent to which PHC has become a new form of professional domination, and

(b) the extent to which it has been, is being and will be institutionalized in a way that prevents it from effectively reaching those who need it most.

If these are valid questions, we have to ask:

What then? What can be done?

What, particularly, can be the reaction of the CMC or its successors? Part of the answer is already clear. In discussing both of the basic questions I have tried to ask, I suggested that what one is up against is human beings as they are. Because one is up against people as they are, one is also up against institutions as they are, mirrors and magnifying glasses of humanity's moral and cultural ambiguities. Both as dispensers and recipients of health care, individuals-in-community are severely limited in their ability to give or receive health. *The fundamental problem that faces us, therefore, is to enlarge that ability.*

CONCLUSIONS

The process by which that is done can be ascribed a variety of different labels according to ideological or ethical positions. It can be called conscientization. It can be called liberation. It can be called cultural revolution. Or it can be called salvation. I'm not suggesting that these are either the same or even roughly equivalent; I am suggesting that *we are all looking for ways in which the delivery of health care does not become subverted into the protection of a profession; and for ways in which the receiving of health care does not become distorted into a process by which my neighbour is robbed.*

Here I think we glimpse something that the CMC has always emphasized, even if sometimes obliquely, namely, that health and salvation are mutually interdependent in every human society, irrespective of culture, political allegiance or level of gross national product (GNP). That interdependence is worked out, not only at the individual level, but also at the macro or social level. The personality of professional and patient is determined by what a passing generation of theologians called the state of grace, *and* the social milieu in which the personality is formed and lived. Thus, salvation does not, cannot and must never be allowed to have a purely personal reference. Salvation is a social process as well as an individual liberation.

The question remains: in operational terms, how can we make real this dawning perception that, in all our societies, rich quite as much as (perhaps even more than) poor, the processes of being healthy and making others healthy have to them a dimension completely ignored by traditional thinking. This is a dimension that acknowledges that the people (both healer and healed) and the institutions are in continuous need of liberation, renewal and "at-one-ment": a need that the biblical tradition calls salvation, but which could often be equally well translated as wholesomeness, or healthfulness? In developed and underdeveloped countries, how do we bring healing and wholeness, not only to the sick, but to those who purport to cure the sick? When we do that, what are the implications for the relationship between the practitioner and the patient, the curer and the cured? This will doubtlessly need much further investigation, but one implication is clear. That relationship ceases to be a relationship between the sick and the healthy. It becomes rather a relationship between 2 people or groups *both* of which know that they are less than whole and *both* of which are seeking to find a greater degree of wholeness.

I know that some of what I have said is contentious and may spark challenge and even fundamental disagreement. So be it. But at the risk of seeming to confound confusion, let me make one final comment. If what I have said is even roughly right, there is clearly a limit to the extent to which the CMC, the *Christian* Medical Commission, can collaborate with agencies which deny to the concept of health the element of transcendental wholeness as expressed in the last paragraph. It is possible that some of these agencies will see that the physician is as much in need of healing as the sick. The real question will be: where will the agencies look for the spiritual resources for the healing of the physician? The Christian answer is (more or less) clear. Can we devise experiments which show those resources in action? Or perhaps they are already at hand?

CHAPTER IX

HEALTH CARE IN THE CONTEXT OF SELF-RELIANT DEVELOPMENT

by Dr Samuel L. Parmar

This paper was first presented at a conference of donor development agencies hosted by the CMC and the German Institute for Medical Mission in October 1975. It was printed in CONTACT 32, April 1976.

THE BASIC CRITERION FOR, AND CONSTITUENT ELEMENTS IN, SELF-RELIANT DEVELOPMENT

Health is not just a matter of providing hospitals, medical experts, and medicines. Many facilities introduced under governmental or private auspices in developing countries fail to reach the needy sectors. They tend to be appropriated by the groups with social influence, economic power and political pull, by the privileged minorities. Thus, potentially praiseworthy efforts for the good of the "common man" remain limited to the existing power groups, and the people they are meant to serve are often excluded. Unless ordinary people can be motivated and mobilized to act together and resist the domination of the traditionally powerful, the majority in developing countries will remain at the margin of social services. Problems of health care in developing countries are, therefore, linked with the socio-economic problems of that society and are linked with the power structures which exist in the society.

A number of new experimental programmes and development projects have been initiated by Christian organizations in developing countries. These have received substantial support from donor agencies in developed countries in the West. It was hoped that these programmes would become self-supporting and provide examples of self-reliance and successful participation by the people. Instead, most of these programmes tend to become new institutions, depending almost wholly on larger injections of funds from outside, and gradually developing all the characteristics of the traditional institutions which they were designed to replace. In any form of social organization, we naturally need institutions, but if these become symbols of power and patronage, or instruments for creating a new elite, or an end in themselves to be kept running without regard for the basic objectives for which they were established, we become slaves of institutionalism. Such appears to be the profile of many Christian institutions, both traditional and those which are so-called, "experimental".

The basic criterion to judge the validity of an institution is to ask if it is meeting the needs of the society. A medical college or a big hospital has full justification to continue if it serves the less privileged sections of society. But, if it trains young doctors to add to the army of expatriates looking for greener pastures in rich nations, or if the services provided by the hospitals are so expensive as to exclude the poor, then it loses the justification for its existence. The same kind of criteria should be applied to the so-called experimental projects or their evaluation: *Do they meet the needs of the community? Do they promote self-reliant development?*

There are 4 constituent elements of self-reliant development:

1. to start from the realities of a given situation;
2. to determine priorities in terms of the needs and resources of that society;
3. to embark on sustained efforts to mobilize available and potential resources within that society or nation;
4. to consider foreign economic links in terms of whether they really serve national priorities.

REALITIES OF A SITUATION

Our societies (developing countries) are called "poor". That description is not quite correct. Not everyone in that society is poor. There are some very rich people in these countries. In fact, economic and political power is concentrated in their hands. However, it is true that poverty, and the factors that cause it, represent the basic reality of our societies. If that society is to progress, it must learn to acquire self-confidence within such conditions of poverty. That is a fundamental

conditions for self-reliance. Developing countries will be doomed to psychological subservience and feelings of inferiority if they apply imitative norms of rich nations to judge what contributes to national and self-respect. That seems to be the tragedy of many countries of the Third World thus far. Having more things, having "modern technology",pursuing the path of consumerism and patterns of production and investment related to it, judging progress largely by a material yardstick of per capita consumption of steel, energy, etc., are examples of imitative norms. To appear to be like rich countries seems to be the main objective. That is why we have often misunderstood development to mean being similar to some industrial country, another Japan, another Federal Republic of Germany, another USA, and so on. Under that kind of an approach, we are doomed to "second-class status" for the foreseeable future.

According to many projections, the gap between developed and developing countries will continue to widen. Over the last 2 decades, this has been happening. In other words, instead of coming nearer to rich nations, the poor nations (or at least the majority of them) have fallen further behind. If our dignity and self-respect depend upon becoming like rich nations, it is obvious that we will never acquire such a sense of equality, of being someone *as we are.* Are we then condemning ourselves to becoming *"non-people"* by imposing upon ourselves the norms and values of affluent societies of the West? Much of economic planning appears to have done exactly that. We need, therefore, to struggle for a kind of intellectual liberation, to accept the historical situation in which we are, and to discover our potentialities in that limiting situation, without any feelings of inadequacy with respect to rich nations. That kind of realism is an essential condition of self-reliance.

Sometimes, the term, "identity" is used to describe this search for self-respect and dignity within the realities of our situation. It is often used by churches in countries of the Third World. It is really a search for recognizing our potentialities and building on them, rather than continuing to depend upon the so-called "parent" churches in the West. The call to moratorium, given by the All Africa Conference of Churches at Lusaka in 1974, symbolizes this quest.

PRIORITIES, NEEDS, RESOURCES

How do we determine our needs? What do we consider to be our resources, and how are these to be utilized? These are important questions in the process of determining priorities. Needs are not to be judged in terms of the style of living and expectations of materially affluent societies. This has been the practice in a number of developing countries, and has resulted in an imitation of consumerism, or prestige production (big projects, big industries, advanced technology, five-star hotels, Jumbo jets, and so on).

In countries infected by consumerism, the economy is geared to the satisfaction of luxury needs, while the majority of the people struggle to survive under conditions which we would normally classify as submarginal. It means that we ignored our realities when we determined our needs. Obviously then, our strategy for development tends to have an imitative concept of our needs and to seek resources to fulfill them. That means ignoring our own resources, such as manpower, simple skills, etc., which could more adequately help to meet the basic needs of a poor society. Such distortions have become a part of the experience of development over the last 2 1/2 decades. It would then be fair to conclude that much of the development process in the Third World has not been in line with self-reliance.

MOBILIZATION OF ACTUAL AND POTENTIAL RESOURCES

If we determine priorities in terms of our needs and resources, then we must make efforts to mobilize the resources that are available, and also try to develop potential resources. There are many simple skills available in any developing country. Instead of building production on the basis of such skills through cottage and small-scale industries, there is a tendency to copy developed nations and to go in for advanced technology and large-scale production. Where cottage industries are promoted, they are linked to foreign demand, such as tourism, or temporary "fancies" (whims) of buyers in rich nations for this or that handicraft product from poor countries. This is a gross misdirection of productive skills of a developing country. These skills should first and foremost be used to provide essentials for the masses of the people. Instead of that, they are harnessed to the foreign trade sector for the benefit of the already prosperous. An example from Indian conditions would illustrate this tendency. Originally, the production of "khadi" or hand-spun cloth was propagated by Mahatma Gandhi to utilize the free time and simple skills of the people (available resources) and to meet the basic need for clothing. It was an essential part of self-reliant development that would break the exploitation of foreign cloth and the village money-lender from whom the poor often had to borrow to buy necessary clothing. Today, in free India, Khadi has been commercialized, its fundamental purpose forgotten. At the moment, it has a good market in some Western countries and with the high income groups in India. It has failed to relieve the scarcity of clothing which the deprived sections suffer from, and failed to make use of people's skills in meeting that basic need. One can only describe it

as a misuse of resources that increases dependence and exploitation.

RELATIONS WITH OTHER COUNTRIES

Self-reliant development does not exclude cooperation with external groups or other nations. But that cooperation has to be in terms of national priorities established on the aforementioned principles. Mobilization of internal resources to meet basic needs is the first step. If international cooperation strengthens that process, it would have a place, otherwise it would be subversive of self-reliance. Quite often, foreign aid has been looked upon as an easy way out, a shortcut to development, as if a society could deal with the problem of poverty without sweat and toil and social dislocation. This may be more true of programmes carried on by voluntary organizations than by governments, though, in general, the observation would apply to both types of activity.

DEFICIENCIES OR ASSETS?

Priorities and strategies of development have been unduly governed by focusing on the limitations which a developing country has. Even the definition of underdevelopment in traditional economics is given in terms of certain inadequacies, such as scarcity of capital, low man/land ratio, (due to large population), insufficient managerial and administrative skills, lack of efficiency, a structure of foreign trade that has proved burdensome, and so on. Naturally, the solution was sought in getting resources to overcome these deficiencies. Aid from industrial countries, technical skills and expertise, foreign investment, experience in agriculture and industry, etc., were brought in to fill the gap. To deal with problems of health, it was felt that more hospitals on the lines of "modern hospitals", more doctors, more medical colleges, in fact, more of what the prosperous societies have, would provide a solution. These efforts have undoubtedly conferred some benefits. But the experience of many developing countries shows that our imitative ways and eagerness to secure help from others, without first building up our own potentialities, has become help that leads to a new kind of helplessness.

The emphasis was on economic growth, a quantitative increase in what we lack. This has resulted in expansion of a questionable kind. For instance, more medical colleges have given more doctors, but we have not asked the important questions: "What kind of medical education should be given in our conditons?" "What should be the motivation of those who are trained?" "Can some of the traditional skills and systems be utilized?", and so on. In the obsession with quantitative increase, the fundamental question has been pushed to the background, namely, "Does this increase deal with problems of poverty and injustice?"

Realism requires that a society should be aware of its shortcomings. But realism demands a further step. That society should also be aware of its assets, its potentiality. In order to overcome shortcomings, such as hunger, malnutrition, illiteracy, disease, low production, etc., it is necessary to activate whatever points of strength there may be. Unfortunately, this has not been fully recognized in much of development economics. *What are the most important assets of a poor country? Its manpower, the people and their skills* is the answer. But we have often thought of the people only as a burden, as the pressure of population on limited resources. It is true that people represent the burden of needs and consumption. However, the same people are also producers, innovators, and custodians of many potentialities still to be developed. Economic planning should, from the outset, use their abilities, strengthen their potentialities, and teach a sense of social responsibility, so that they would be willing to apply their efforts in the interest of the total community. When India began economic planning in 1951, the number of unemployed were about 3.3 million. In 1974, after 2 decades of planning, that list had risen to nearly 12 million. Obviously, we have not made the right use of our assets. There has been impressive industrial and agricultural progress in India. In the area of social service, such as education, health, improving the condition of outcasts, etc., there has been a remarkable increase. But the fact that unemployment and underemployment have also risen, points to some basic contradictions in our method of planning and our priorities. That has now been recognized, and the shift since 1971 to "BANISH POVERTY" (a slogan with which the Congress Party swept the elections) symbolizes the mood. But the mood must become a movement, and be made a reality in economic policies that deal with unemployment. Simultaneously, there has to be an increase in the production of essential goods and services, so that, after getting employment, people will be able to buy the basic necessities of life. Instead of production for profit in response to the demand of high-income groups, it is necessary to have production of socially necessary things. That has many implications. It requires a stoppage of luxury and non-essential production, of curbs on the consumption of high-income groups which encourage that kind of production, of regulation on the direction of investment so that it flows into the essential sector, and so on. If a society is not giving priority to mobilization and use of what it has, there is no justification to seek resources from outside. It would only increase dependence and weaken self-reliance.

This applies as much to church-related programmes as to national effort. For instance, we must ask if

the church in India has tried to mobilize internally available assets, not only within the community which is called "Christian", but in the larger community which the church claims to serve. If not, then infusion of resources from outside can only weaken our will and increase the sense of dependency.

MOBILIZING ASSETS

In order to mobilize assets, it is essential to develop the will of the community. In practical terms, this may be possible only if the deprived groups, not the privileged, see that the benefits of their efforts are coming to them immediately in the form of goods and services that assure a desirable minimum for life. Economists and planners tend to promise growth and a higher standard of living in the long run. Indian planning projected a doubling of per capita income in 25 years. Figures for per capita income can be deceptive averages. The "poor" do not necessarily benefit from the increase which tends to be monopolized by privileged sections.

People who are hungry and victims of injustice today should not be expected to wait patiently for 25 years before their condition improves. After more than 2 decades of planning in India, 40% of the people are living below the poverty line. That is the official estimate. Unofficial estimates have put the percentage as high as 60%. How can we keep saying to this submerged majority that it must wait for another 2 decades before its condition can improve?

One of the important ways to develop national will for development efforts is that the poor secure immediate benefits from improvement in the economic condition. This would be possible if policies of social justice were followed in a society. In an important way, social justice is integral to self-reliance. When people receive a fair share of social production, they are motivated to contribute to social effort. Instead of the "rich becoming richer and the poor poorer", as has happened in many developing countries, there has to be a reduction of inequalities, a better sharing of economic, social and political power between the privileged few and the majority.

However, in order to assure a desirable minimum for the many, it becomes necessary to impose a maximum on the consumption of the few privileged groups. There are not enough resources in a developing country to provide all that the rich want and all that the poor need. Since self-reliant development requires the full effort of the majority, restrictions have to be placed on those who "have". This is part of social justice.

PEOPLE

The intention of these comments is to show that self-reliant development concentrates on people. It questions and rejects the conventional description of countries as "poor". When we talk about poor countries, we get caught in the trap of national and per capita incomes, rates of growth and quantities. All these are important, but only in relation to what is happening to people.

When we talk about people and their poverty, we have to ask the fundamental question, "Why are these people poor? Most of them are quite hard-working often more than some of us who are more prosperous. Then why are they poor? An important part of the answer is that certain relationships in society are responsible for their continuing poverty. These are relationships of property, of ownership, of power in various forms. Many of the developing countries have a social system in which some are at the top and some have been the traditional underdogs. To overcome poverty and injustice, (which are inherent in such relationships), we have to change the social system. No amount of resources will bring about change. On the contrary, since these will fall into the control of those who have power, they will only increase the hold and dominance of such groups. This is evident from the trends in many developing countries. That is why the new understanding of development emphasizes structural change, the need to change existing power and property relationships. Resources are important. But unless a new pattern of social relationships is established, they will keep the poor in conditions of misery.

A country is not poor. Certain groups of people in that country are poor. Unfortunately, they are the majority in developing countries. The focus of development, since it is on poverty, has to be on these people and their basic needs. This is true in specialized services like medicine and health as well. An expensive and sophisticated medical system, imitative of industrial countries, serves only the higher income groups in developing countries, plus a small section of the poor. The larger section of the poor are excluded. Hence, in deciding the nature of health care in developing countries, this aspect of the question should be kept in mind. Primary or community health care focuses on the people, not only on their health needs, but also on the ability they have and must discover to do something about it.

Health care should be fitted into a framework of self-reliant development. Judged in the light of this, much of the health programme in developing countries is misdirected. The emphasis on primary or community health care is more in line with the demands of self-reliance.

CHAPTER X

THE PATTERNS OF MEDICAL PRACTICE IN ENGLAND AND THE THIRD WORLD

by Dr Thomas Heller

This article appeared in CONTACT 33, June 1976.

INTRODUCTION

The problems of the developed world are usually discussed in isolation from those of the Third World. It is commonly held that our problems are entirely different from those to be found in the developing world and that we can be thankful that we are not in the same desperate situation that can be found "over there". Coupled with this belief is something of a criticism of the peoples of the Third World themselves and, in particular, the members of their educated élites, who are thought to be lacking in the devotion which is said to be required to "get the country out of its troubles".

These sorts of opinions have led to the development of the aid mentality, where the Western nations are thought to be in a position of strength and can afford to give away some of their surplus, or a portion of their superior knowledge, to help alleviate some of these remote problems. More recently, some radical sociologists and economic theorists have suggested that it has been our intrusion into the affairs of these nations which are now poor that has caused their underdevelopment, and will be a hindrance to their future development. They argue that the more contact an area has had with Western economic and cultural influence, the less real development has taken place there.[1]

Both these theories seem to suggest that the problems of the developing world are indeed different from those of the Western world and, therefore, any possible solutions to the problems will rely on separate consideration of 2 different sets of conditions. The purpose of this essay is to discuss the possibility that both the problems, and any likely solutions, are identical both "at home and away". The medical profession and the distribution of health care is taken as the subject of study.

An attempt will be made to describe the patterns of health care in the developing nations, and the basic similarity of this pattern to that found in England at the present time. Inasmuch as the medical profession can be said to have a dominant professional ideology, this will be described, and its effects on the distribution of care shown.

The aid mentality transferred to medicine has led to much of the current thinking about the problems of the health of the people in the Third World. It is thought that "they" are in a terrible way, undernourished and disease-ridden, and what "they" want is better coverage of our brand of medicine. In the past, there have been attempts to administer this through large gleaming hospitals, with the staff making brief tours into the bush to immunize anyone they could catch, and distribute birth control devices to stop their "problems" getting any worse. It has recently become obvious to most people that this effort has been unsuccessful; the people continue to be unhealthy and ever-multiplying.

This insensitive influx of Western medical technology is easy to criticize. It is frequently stated to have been the root cause of the present maldistribution of health care, and to have set the present attitudes to be found amongst members of the Third-World medical profession. It is now thought enlightened to suggest that what "they" want is increased emphasis on preventive medicine with training of some type of village-level doctors, mainly in public health, and providing only a very simple curative service. Even if this approach is the correct one, it is very unlikely that an effective change of this nature will actually take place without a similar alteration in emphasis within our own Western health care delivery system. Rather like the grossly fat parent attempting to stop a child eating between meals, we stand little chance of effecting any change of this nature in other people's affairs, until we realize that our own situation is in as urgent need of critical examination. Similarly, while it is easy to criticize those members of the medical profession within developing nations who appear to lack the determination to make the adjustments that we

would now consider necessary to achieve this shift of emphasis in health care delivery, we should be fully aware of the attitudes of our own medical profession at home, who are resisting exactly similar changes, and who appear intent only to pursue their own sectional interests.

We will not be concerned at this preliminary stage to recommend precise cures for the various ills outlined, only to suggest that it is unlikely that any real progress will be made in improving the health of the bulk of the population in the developing portions of the globe, until we exert similar energy and thought to our own problems, and can be seen to be applying the new standards to ourselves also.

PATTERNS OF DISTRIBUTION OF HEALTH CARE

Concentration in Centres of Excellence

It is very well known now that the major part of the health care effort in the Third World is concentrated in the large towns rather than in the rural areas where the majority of the population lives. This has led to the invention and acceptance of the phrase "rule of three quarters", by David Morley, who observed that "three quarters of the population lives in rural areas, yet three quarters of the health care effort is concentrated in urban areas..." etc.[2] However, a very patchy distribution is evident in the allocation of health care resources in England. Many of the most needy areas are very poorly supplied with resources, while the metropolitan areas of London, and the teaching areas of all the various health regions are well endowed with hospital facilities and staff.

Table 1

Resource Distribution Between Teaching and Non-teaching Areas[3]

Regional Health Authority	Hospital expenditure per capita (1971/2) (% difference from national mean*)		
	Teaching Area		Non-teaching Areas
Mersey	Liverpool	+62	-17.5
South Western	Avon	+14	-24.3
Yorkshire	Leeds	+ 2	-11.7
West Midlands	Birmingham	+10	-29.0

In some rural areas, there is a shortage of resources that is similar to the rural areas of the Third World. The East Anglian region, which is mostly rural, has the poorest provision of health and social services in all England.[4] Total revenue allocation for hospital services is 17% per head below the average for the rest of the country. However, this shortfall is not evenly distributed within the region itself, and, once again, it is the rural districts that have the poorest provision of facilities. Expenditure in the urban teaching district (Cambridge) falls only 13% below the national average, while Kings Lynn and Great Yarmouth districts (both very rural) are each more than 51% below average. Capital expenditure per head of population between 1948 and 1974 has been over 6 times greater in the Cambridge district than in Great Yarmouth, and the present cost of running a single hospital in Cambridge (Addenbrookes) is almost as much as the *entire* health services budget for Kings Lynn and Great Yarmouth and Waveny health districts.

Table 2

Health Services Budgets in Three Districts 1975/6

	£ Revenue Allocation
Addenbrookes Hospital (678 beds including 178 regional specialty):	6,541,655
Kings Lynn Health District (population 167,300) all services:	3,542,295
Great Yarmouth and Waveny District (population 174,950) all services:	3,700,331

This maldistribution of resources is shown also by the ability of the various districts to attract hospital staff. Thus, while Cambridge has 0.76 hospital medical staff per 1,000 population and 5.46 hospital nursing staff, Great Yarmouth is able to provide 0.4 medical staff and 3.7 nursing staff per 1,000 population. The people living in the poorly supplied districts naturally have to put up with an inferior service. Table 3 demonstrates that the waiting lists are longer, and more have to travel outside their own district for hospital treatment.

Under the new thinking, shortfalls in provision of hospital resources are not necessarily detrimental, where they are compensated for by the provision of increased community facilities. In the Third World, it is frequently noticed, however, that exactly those areas which are most poorly provided with hospital facilities also have the most poorly developed community facilities. Exactly the same pattern can be demonstrated in the English health services.

The Emphasis on Curative Medicine

There can no longer be any serious doubt that the present amounts of money allocated to health

* The mean is the arithmetic mid-point between the highest and lowest figure.

Table 3

Intra-regional Variations in Health Services Provision: East Anglia 1973/4

Health District	Acute waiting list/ 1,000	Hospital revenue: per capita % difference from national mean	£ Capital expenditure per head: 1948-74	Staff per 1,000 population medical	Staff per 1,000 population nursing	% patients treated outside district
Cambridge	7.7	-13.4	61.47	0.76	5.46	12
Great Yarmouth	15.6	-51.2	10.90	0.42	3.60	23
Kings Lynn	10.8	-51.9	20.32	0.40	3.83	21

service budgets in the Third World would be better spent by switching the bulk of provision from the current predominantly curative services towards preventive medicine. This unfortunate situation finds an exact parallel in the distribution of medical resources in Western health care systems. Presently in Britain, we spend over 66% of our total health budget on the hospital services, while only a very small fraction is devoted to preventive medicine.[6] Detailed examination of the health budget of any region reveals a distribution of resources that would arouse the indignation of the experts in health care delivery if it were to be found in a "developing" country.

Table 4

Expenditure on Hospital and Community Health Facilities English Regions 1973/4

Health region	Hospital revenue: % difference from mean	Community health expenditure: % difference from mean
Metropolitan London	+24.1	+5.9
South-Western	- 3.6	+4.1
Wessex	- 13.6	+1.0
Liverpool	+ 7.0	- 0.6
Manchester	- 9.1	- 1.0
Oxford	- 10.1	- 1.6
Newcastle	- 8.4	- 1.7
Leeds	- 3.8	- 4.7
East Anglia	- 17.4	- 4.8
Birmingham	- 14.8	- 7.1
Sheffield	- 22.5	- 7.3

Table 5

Intra-regional Expenditure on Hospital and Community Health Facilities: East Anglian Region 1974

Health district	Hospital revenue: % difference from mean	Community health expenditure: % difference from mean
Cambridge	+19.0	+13.5
Norwich	+12.9	+ 6.1
Ipswich	+ 7.2	+15.7
Bury	+ 6.4	- 1.3
Great Yarmouth	- 32.9	- 12.2
Kings Lynn	- 33.9	- 16.5
Peterborough	- 18.6	- 32.6

Table 6

Intra-regional Distribution of Finance: East Anglian Region 1975/6

Item	£ revenue allocation	% of total
Hospital Services	51,570,109	72.4
School Health Services	730,270	1.025
Family Planning	197,925	0.28
Health Education	56,157	0.08
Screening Services	1,600	0.002
Health Visiting	652,572	0.92
Domiciliary Services	1,928,866	2.71
Total Community and School Health Services		5.9
Ambulance Service	2,066,609	2.9
Regional Blood Transfusion Service	536,926	0.8
Administration Costs (included above)	9,639,179	14.0

Although it could be claimed that our current level of knowledge is such that there are not many disease states that we actually know how to prevent, this situation will surely continue until we shift emphasis and resources to solving the problems of prevention. The areas in which there is considerable knowledge of effective preventive medicine will serve to illustrate the current maldistribution of resources in this country. These areas include:

1. SMOKING AND RELATED DISEASES:

There is now no doubt that cigarette smoking damages lungs, heart, arteries, gastrointestinal tract, urinary system and the unborn children of mothers who smoke.[8] Each year, 30,000 people die in Britain from carcinoma of the lung, and

over 25,000 from bronchitis.[9] Apart from this human toll, the costs to the economy are staggering. Smokers use the health service more frequently than non-smokers,[7] and over 30 million work days are lost annually from chronic bronchitis. The anti-smoking campaign run by the Health Education Council had an annual budget of approximately £702,293[10] in the same year that over £70 million were spent promoting cigarette smoking by tobacco companies.[11]

2. OCCUPATIONAL HEALTH:

A crude cost-benefit equation can also be attempted in the field of occupational medicine. Over 741,000 new claims for industrial injury are made each year, and over 17 million days are lost each year following injuries at work, resulting in a bill of over £215 million for the country's industrial benefits.[12] To combat this, the Employment Medical Advisory Service has been established with a budget of approximately £3 million and a staff of about 100 doctors.[13]

The Pursuit of Technological Medicine

Much attention is focused on the undesirability of pursuing advanced technological medicine in the Third World. It appears highly inappropriate that a heart-lung machine is installed, or a complex kidney unit developed in a country where there is gross malnutrition and where people die for want of simple preventive or curative medicine. Similar distortions can be demonstrated in the "developed" nations, where the channelling of scarce resources towards the highly complex procedures that can only benefit a few, means that the majority are left with a service of very poor quality. The majority of patients in this country are in geriatric, psychiatric or long-stay hospitals, yet it is exactly these hospitals that remain starved of funds, while no expense is saved aiming at various technological goals.

Table 7

Cost Per Inpatient Week in Various Types of Hospital

(as percentage of cost in acute non-teaching hospital)[14]

Service	Long-stay	Chronic	Mental illness	Mental handicap
Total net cost	44	39	32	30
Medical	27	13	26	13
Nursing	66	66	45	40
Domestic	58	50	27	27
Catering	55	48	45	43
Cleaning	68	55	35	32

THE MEDICAL PROFESSION

Intra-country Mobility

There is frequent implicit criticism of the members of the medical profession within the Third World. It is said that "they" won't work in the needy areas and usually tend to migrate towards the large cities where there are already plenty of doctors. They are thought to be attracted to those areas of their countries where they can mix with others of their own social standing, and possibly supplement their incomes with private work. Before offering such criticisms, we ought really to examine the distribution patterns of our own doctors within the "developed" nations.

At its inception, the (British) National Health Service (NHS) inherited an unequal distribution of doctors, and, ever since then, successive governments have attempted to induce general practitioners to work in those areas of Britain most in need of medical personnel. These attempts have been largely unsuccessful, and the doctors tend to ignore the financial rewards in order to practise in more attractive areas, already well endowed with doctors.[15] "...There is everything a doctor needs here, fishing, golf course, walking, not many people..." local General Practitioner (GP) in Devon.[15]

"...My ideal practice would be in a salubrious area with the right middle-class neighbours to consort with...stockbrokers, solicitors etc..." GP in Essex.[15]

As in the Third World, it is the areas that attract the best qualified, best equipped doctors that are in the least need of medical care. The areas with the highest proportions of ordinary working-class people attract the fewest doctors. Yet it is these sections of the community that suffer more than their share of the nation's morbidity and mortality. This has led to the description and validation of "the inverse care law", whereby those most in need of medical care are the least likely to receive it.[16]

The Brain Drain

A proportion of the doctors trained in the Third World leave their country of origin/training to work in those pastures that they consider to be greener. This represents a very sizeable drain of resources for the developing countries and a real boost to the host's medical services. From exactly those countries that are most in need of trained medical personnel, there is a continuous drain of such people. At the end of 1967, it was estimated that over 11,000 doctors trained in India were working abroad. Between 1962 and 1967, Pakistan lost over 2,000 doctors and currently loses over 50% of its annual output straight from medical school. Similarly, Sri Lanka, despite attempted restrictions, loses 120 doctors (50%) of its new graduates each year.[17] Iran loses 25%, etc.[18] Possibly the most amazing story comes from the Phillipines, where the authorities had to hire a football stadium one year to seat all the doctors who had applied to take the qualifying exam to work in the USA![19]

The benefit of this continuous drain from the Third World falls on our Western health services, which would certainly find it impossible to maintain present standards without the influx of foreign graduates. In Britain currently, 35% of all hospital doctors were trained overseas, and over 60% of senior housemen were trained in the Third World. They fill the jobs that our own graduates will not take, and are diverted towards the unpopular hospitals and the unpopular specialties. Only 19% of teaching hospital doctors come from abroad, while the percentage rises to 39% in all other hospitals.[20]

Before we offer comments about the drain of resources, or even propose possible solutions, we should realize that exactly the same drain continues of our own graduates. Each year, there is a net loss of about 300 doctors, representing the output of more than two medical schools and equivalent to 10% of new medical graduates.[21] It would appear possible that one answer to our own problem, as well as to those apparent in developing countries, might be to attempt to select people for training who are motivated to serve within their own community after qualification, and to make quite sure that the training they receive is fully relevant to the conditions that they will experience in actual practice.

The Aspirations of the Medical Profession

It is probable that the present-day medical profession within the Third World still regards the members of the Western medical profession as their reference group against which they judge their own performance. Thus, the aspirations that are currently found within the Third World have their basis in the West. It might, therefore, be considered unjust to criticize the individual members of the profession within the Third World for wishing to pursue advanced, technological medicine, if this is the dominant aspiration of our own professional groups.

In Britain currently, the teaching of community medicine, public health and occupational medicine is minimal and, in some colleges, actually non-existent. In a recent survey of 25 medical schools, 10 had no teaching in occupational medicine at all,[22] and only 4 out of the 12 London teaching hospitals had established departments of community medicine 4 years after this had been recommended by the Royal Commission on Medical Education.[23] This emphasis is reflected in the career preferences of the medical students themselves, and the 3 latest surveys have all shown that under 2% of students would choose community medicine as their first choice of career.[24]

Once started on their professional life, specialists in public health or community medicine still suffer a very lowly status. They are usually not considered as "proper doctors" by the clinicians, nor are they "real administrators" according to the professional administrators of the service. There are no specialists in community medicine on the powerful committee that distributes the merit awards to consultants,[25] and, although 73% of thoracic surgeons and 70% of cardiologists receive merit awards, only 2.9% of all community physicians are rewarded in this way.[12]

It is frequently noted that the doctors in the Third World all come from privileged backgrounds, and are keen to serve the members of their own social class after qualification. It is thought that this creates a "cultural gap" between them and the less well educated and socially inferior patients, especially in disadvantaged or rural areas. There is considerable evidence that such a gap also separates members of Western health care professional groups from the majority of the population they attempt to serve. In Britain, 68,8% of first-year medical students in 1961 were from high social class families, and by 1966 this had risen to 75.7%, although only 18% of the total population were members of these 2 groups.[26] In the nursing profession in 1972, 52% of those chosen for State Registered Nurse (SRN) training came from professional or managerial homes, while only 12% came from the families of semiskilled or unskilled workers.[27]

Thus, it can be seen that our health services are largely run by people who have never experienced anything other than middle-class life, and are designed by these people to cater very much for middle-class patterns of illness behaviour. The ordinary people from working-class backgrounds frequently find use of the health care network a confusing and frightening experience. Uptake of services from those sections of the community most in need of care is often very low. This has been demonstrated for the uptake of testing for cervical cancer,[28] family planning services,[29] and in the use and acceptance of appointment systems. Similarly, the psychiatric services often present a real obstacle to those who are socially remote from the providers of the service, and who might have a different, less verbal, means of communication from those who can expect to receive the best treatment. This has led to the observation that: "Exactly those social factors that *increase* the risk of developing psychiatric disorder, greatly *reduce* the chances of reaching psychiatric services."[30]

Western Medical Imperialism

It is easy to see that the spread of Western-type medical care throughout the Third World represents a system that has been imposed from without. The Western methods of treatment are now accepted by the local "establishments", often with the attempted exclusion of more traditional methods of treating or accepting disease. The practitioners of

traditional medicine may be called quacks (people who pretend to have medical knowledge) by the authorities, but they are certainly still acceptable to the actual people when they fall ill, especially in rural areas. The majority are still found to consult traditional healers in preference to, or in addition to, the Western-style services, even where these are freely available. Much attention in the Third World is now being directed towards incorporating the acceptability of traditional healers into the design of new health systems. Perhaps we in the West should be prepared to examine our own history, and see if a similar pattern has not occurred in the development of our own services and professional groups.

The predominant method that has developed into our current "Western system" of treating disease, was, historically, only one of several rival ways of dealing with disease. Long before the advent of chemotherapy, and before any really effective medical interventions were being practised, the ancestors of our present doctors had achieved a virtual monopoly in treating disease. Through their close associations with other branches of the establishment, they had succeeded in making most other rival brands of medical treatment unacceptable, or even illegal. Thus, before any real skill of success in dealing with pathology had been developed, one particular type of "medicine man" had become a "professional", and was already protected by all sorts of registration laws and closed-shop tactics (efforts to exclude newcomers and outsiders). These dominant practitioners were able to claim the much later scientific advances as their very own, and achieve respectability and some measure of efficacy. Their strength in defeating potential opposition was formidable. Possibly the best documented example is in the history of their professionalization between the 14th and 17th centuries, when they actively encouraged and sponsored the witch-hunting of their rival practitioners. The ordinary women of the villages, who were skilled or experienced in dealing with disease, or undertook midwifery, were hounded and denounced as witches for several centuries all over Europe.

Their skills were pronounced witchcraft by the newly emergent medical profession and they were tortured and burnt in their thousands.[31]

Both in this country and throughout the Third World, there have always been people who become knowledgeable, experienced and concerned about illness, or who are simply good at caring for others. The recently dominant Western system, with its rigid, professional barriers, does not realize the potential of these people who are readily available in every village and in most families. Knowledge about illness has become tightly guarded by those professionals whose interest it is to keep tight control over their source of power. Those who would surely be able to care for the sick members of society are denied the opportunity by the prevailing attitudes and actual structure of the health care system. An amalgamation of the technical knowledge, now the exclusive property of a few, with the caring potential within each society would, indeed, be powerful medicine.

DISCUSSION

If we are convinced that we have described patterns of medical care and medical professional attitudes that are universal, what implications does this have on the changes that we should advocate for the promotion of health in the developed world, and also for assisting the Third World?

1. Firstly, the aid mentality would surely no longer be seen to be appropriate. Offering portions of our own, very imperfect medical system to the developing nations cannot possibly assist them. Even the "new improved" packages that enlightened aid givers now advocate, incorporating community-based projects etc., stand *"a reduced chance"* of success unless we are seen to be taking the same medicine for our own similar condition.

This does not mean that we should stop offering help altogether to the developing world; only that we can no longer offer it from an imagined position of strength. Nor does it mean that we have to wait until we have developed the perfect system of health care delivery before we start to export (impose) that new one. Rather, we should accept that many of the problems regarding the promotion of health are universal and that, *together with* the Third World, we stand some improved chance of arriving at solutions. Naturally, the exact details are dependent on the local social and cultural conditions, but many basic features may well be universal, e.g., prevention before cure, patient-centred approach, service subject to democratic control, minimal social barriers to receiving treatment, etc., etc.

2. In the West, we have a certain technical superiority in some aspects of medical treatment and should make this know-how available to the developing world without social or financial cost. However, we must also accept that there are many ways in which we have to learn from the "developing" countries and their attempts to cope with essentially similar problems to ours.

One of the vital lessons that we should learn is to reject the present separation of health care delivery systems from the other factors that are known to have a direct effect on the health of the population. In some developing nations, an integrated assault is under way on many of the social problems of society, and medicine represents only one very small portion of this programme. Housing, education,

income redistribution, agricultural production and nutrition programmes all affect the "healthiness" of the population more than the actual medical service, and are no longer to be considered separately. Medicine, which is not treated in this country as a political subject, automatically becomes very political indeed. Indeed, if the health of the population is best enhanced by achieving more equitable distribution of wealth, and other of society's assets, then it is through political change that those concerned with the "healthiness" of their population should be required to act.

Two countries which have received considerable public attention because of great improvement in the health of their populations (China and Cuba) have brought this about through radical alterations in the social and economic distribution of the assets of their societies. Only a very small part of their improved health status can be attributed to changes that have been made in their medical services. This certainly dosen't mean that we now have to emulate the health care systems of Cuba or China, only that we should be willing to learn from their experiences and, in particular, that improvements in the measurable health of their people have come about through changes in many spheres, as well as purely medical.

On a much smaller scale, there are many other experiments in developing countries that we should be prepared to learn from. In Guatemala, Carroll Behrhorst is attempting to make social and economic changes on a micro scale. Already these have led to improvements in the health of the people that are his concern. Other experiments which are in progress in many of the spheres that we have indicated might also be adapted to our own health care system, such as:

- switching resources to preventive medicine,
- the use of ancillary workers rather than doctors,
- multidisciplinary health teams,
- cooperation with traditional healers,
- democratic control over the health system.

Not all the experiments are successful, but the mistakes are also well worth observing. If indeed the same patterns of maldistribution of resources are present in the developed world as are present in the developing world, then it is very evident that we are lagging well *behind* in our efforts to find viable solutions.

3. Although this essay has been concerned with the maldistribution of health care resources and the attitudes and assumptions surrounding the promotion of health in the community, similar problems need examination in every other sphere. Within the global community, some population groups have more than enough of everything, including health care, while others are desperately in need of the necessities of life. However, it is apparently no longer sufficient to divide the world simply into rich nations and poor nations, for within the "rich" nations, there are also a great many who live in poverty. This essay has attempted to examine whether the factors that are denying health care from those at the bottom of the social order in rich countries are the same factors denying health care to those at the bottom of the Third-World pile. If this is the case, then the only solution to the provision of resources of all sorts to the impoverished members of each society would seem to lie in redistribution of available resources, rather than adding resources to a fundamentally badly organized system.

The "trickle-down" theory, whereby the increasing financial rewards that accrue to a country are supposed to trickle down through all sections in order to relieve the plight of those at the bottom of the pyramid, is now under intense attack and certainly no longer universally accepted. It appears that those at the bottom of the pyramid, waiting, never in fact get the goods, and the gap between rich and poor grows larger. Similarly, if health care resources are added to the system organized in the present patterns, then it is likely that a majority in the developed world, as in the Third World, will still be denied access to what should be regarded as a basic human right.

BIBLIOGRAPHY

1. Frank, A. G. "The Development of Underdevelopment". *Monthly Review,* Volume 18 – No. 4. 1966.
2. Morley, D. *Paediatric Priorities in the Developing World.* Butterworths, London. 1973.
3. Buxton, M. J. "Distribution of Hospital Resources". *British Medical Journal,* Supplement 1, p. 345-7. 1975.
4. Heller, T. D. "Profile of the Health Resources of East Anglia". (Unpublished). 1976.
5. Noyce, J. "Regional Variations in the Allocation of Financial Resources to the Community Health Services". *The Lancet,* Volume I, p. 554. 1974.
6. Cooper, M. H. *Rationing Health Care.* Croom Helm. 1975.
7. Ashford, J. R. *British Journal of Preventive and Social Medicine.* 27,8. 1973.
8. Editorial *British Medical Journal.* June 2, p. 503. 1973.
9. D. H. S. S. "On the State of the Public Health". Her Majesty's Stationery Office. 1973.

10. Health Education Council — *Annual Report.* 1973/4.

11. — "Talking Politics". *The Lancet,* April 19th, p. 912. 1975.

12. Department of Health and Social Security — *Annual Report.* Her Majesty's Stationery Office. 1974.

13. Employment Medical Advisory Service — *Annual Report. 1973-74.* 1974.

14. Townsend, P. — "Inequality and the Health Service". *The Lancet,* June, p. 1179. 1974.

15. Butler, J. R. — *Family Doctors and Public Policy.* Routledge and Keegan Paul. 1973.

16. Hart, J. T. — "The Inverse Care Law". *The Lancet,* February, Volume I, p. 405. 1971.

17. Senewratne, B. — "Emigration of Doctors". *British Medical Journal.* Volume I p. 618-669. 1975.

18. Ronaghy, H. A. — "Physician Migration to the USA". *JAMA,* 227,5, p. 538. 1974.

19. Editorial — "How Many Doctors? ". *The Lancet,* December, p. 1367. 1973

20. Da Costa — "The Overseas Doctor and the Health Service". *Consultant,* September, No. 27, p. 10. 1974.

21. Waldron, H. A. — "Undergraduate Training in Occupational Medicine". *The Lancet,* August, p. 277. 1974.

22. Editorial — *The Guardian.* October 8th, 1975.

23. — "Who's for Community Medicine? ". *The Lancet,* December, p. 1297. 1972.

24. McLaughlin, C. — "Career Preferences". *The Lancet,* May, p. 870. 1974.

25. Brown, S. — "Examination of the Distinction Award System". *British Medical Journal,* Supplement 1, p. 162-5. 1975.

26. Royal Commission on Medical Education — Her Majesty's Stationery Office. 1968.

27. — *Report of the Committee on Nursing.* Cmnd. 5115, Her Majesty's Stationery Office. 1972.

28. Randall, K. J. — *The Lancet.* Volume II, p. 1303. 1974.

29. Bone, M. — "Family Planning Services in England & Wales". Her Majesty's Stationery Office. 1973.

30. Brown, G. — "Social Class and Psychiatric Disturbance". *Sociology,* May. 1975.

31. Ehrenreich, B. — *Witches, Midwives and Nurses.* Compendium Press, London. 1974.

CHAPTER XI

THE ANNUAL MEETING OF THE CHRISTIAN MEDICAL COMMISSION 17-23 APRIL 1977

At the annual meeting of the CMC in April 1977 at Royal Holloway College, Egham, Surrey, England, it was recommended that the proceedings of the meeting be shared with the readers of CONTACT, CMC's bi-monthly bulletin, in the interests of initiating some new thrusts and directions for CMC work. This report thus appeared in CONTACT 39, June 1977, as a Special News Issue.

INTRODUCTION

From 17-23 April 1977, 28 people from 20 countries assembled at Royal Holloway College, Egham, England, to take part in the annual meeting of the Christian Medical Commission. It was the first full-scale gathering of the Commission to follow the Fifth Assembly of the World Council of Churches held in Nairobi at the close of 1975. The term of the old Commission expired at the time of the Assembly, and a new Commission was appointed. Thus, for many members of this newly-constituted Commission, it was their first opportunity to share directly in the work of the CMC.

The voice of the churches, as expressed at the Assembly in Nairobi and at a subsequent meeting of the Central Committee of the World Council of Churches, placed a common theme and responsibility before all the sub-units of the Programme Unit on Justice and Service. This common theme was the search for a "Just, Participatory and Sustainable Society". Central to the programmes of all these sub-units has been and still is the struggle for human dignity and social justice. The emphasis reflected in this theme relates closely to the existing world situation. Within the short span of the last five years, the world has been shaken by a series of global crises. A major food crisis has taken its heavy toll. Energy sources, once cheap, abundant and considered clean, have proved to be otherwise. The monetary system is in disarray. Economic systems and theories are under challenge, and statistics make a mockery of the so-called "development decade". The gap between rich and poor has continued to widen within and between nations. Systematic injustice, scarcity of resources, environmental deterioration, poor health, increasing malnutrition and growing militarism have combined to threaten the very survival of humankind. We live in a self-destructive social order. A new social order that is both just and sustainable must emerge. Since the impending peril threatens all, the challenge has to be faced on a universal scale. It requires the harnessing of specialized knowledge and political efforts. Above all, it demands a fresh, integrated vision of a new society, built on a firm basis of human values and enduring cultural norms. None of this can be achieved unless everyone is involved and takes full responsibility for it, for the dimension of people's participation is crucial to the justice and sustainability of the social system for which we search.

Ms Barrow commented on this in her Director's Report:

> "From its very beginning, the CMC has been concerned with the question of health care and social justice: the most comprehensive ethical issue in health care for churches. In the search for a new social order, and as the church tries to find its role in this search, the questions of health and health care provision come back again and again to the inter-related dynamics of justice, participation and sustainability. In many parts of the world, land tenure, employment opportunities, the basic conveniences of water and sanitation, the capacity of the rural sector to feed itself and other pressures of social injustice constitute the gravest public health problems. They loom even larger than the well-known distributive injustice in the health care services. Many are still deprived of a reasonable chance to have a healthy life by the decision makers. Furthermore, present patterns exclude the vast majority of people from participating in any way in their concern for health. They do not have an opportunity to identify their needs, to express them, or to establish the priorities. They have no share in the process of planning to meet those needs, and they are given no say or responsibility in the administration and control of the health care system. The whole dimension of people's participation is so crucial to the justice *and* sustainability of the social system as it relates to health. A healthy society cannot be sustained unless everyone is involved and responsible. Sustainability is also closely tied to the matter of

technology for healthy living. It is essential that the people of a given place be able to master and sustain the technology utilized in health care, in agriculture and nutrition, in the development of water supplies, energy and sanitation, and in the training and administration of those who work in the sphere of health, agriculture, and community development."

CHURCH AND GOVERNMENT COLLABORATION IN PROMOTING THE HEALTH OF ALL PEOPLES

Churches around the world are faced with a time of crucial decision making with respect to their health programmes. This is true for a variety of reasons. An important factor is surely that which represents the desire of church leaders and health workers to conscientiously re-examine what they are doing to see whether their most fundamental and long-term objectives are being met by the activities being carried out. Some are convinced that this kind of re-examination requires a fresh look at the basic goals and objectives in order to assure themselves that their activities are in line with these objectives. One common theme is emerging from many different contexts in the course of this reflective process. *The basic concern of the church in the health sphere is to work with loving commitment for the improvement of health and quality of life for as many people as possible.* This is focused most specifically on the poor, the oppressed and the suffering. Recognition of the need to promote the human dignity of all people has led to the conviction that *people should participate actively in all phases of their own development and health care.* Taking these as fundamental pillars of the churches' involvement in health work, an examination of existing systems and programmes reveals a number of problems. It is well known, for example, that hospitals involved in purely curative programmes make little impact on the general level of health in the community. Curative programmes are primarily restorative and their purpose is to treat those who fall ill. By their design they are not capable of preventing disease or of positively strengthening the health of people.

In addition to these reflective impulses to re-examine health programmes, a number of external factors of a very practical nature have brought about the need for new decisions. Escalating salaries and spiralling drug costs have made the continued proprietorship of many hospitals by the churches exceedingly difficult and, in some cases, impossible. Since most church-related hospitals are not capable of attracting large government or external grants for financial support, they are obliged to charge fees for their work which, very often, far exceed those of government health programmes. With the general inflation which has affected hospitals around the world, the fee structures of many church-related institutions have begun to exclude those most in need.

A third set of circumstances has brought many churches to a crossroads of decision. In Africa, and in other parts of the developing world, more and more governments are exercising their prerogatives to assume the health care of their own people. As a result, the control of many church hospitals is being transferred to the government. CMC views this as basically a desirable and justifiable trend for those countries, and a number of churches have welcomed this trend with real relief. Consequently, some churches are now finding themselves without responsibility for institutionalized forms of medical care, and yet they wish to stay involved in a broad concern for the health of the people around them. This has led to a search for other, and perhaps better, means to remain active in this area of social concern. The answer which many are finding, and which is strongly endorsed by the CMC, is to move positively into the wide range of community development and primary health care activities.

The choices that will be made will vary from programme to programme and from country to country. They will depend on: whether the existing programmes of the churches are financially viable and continuing to meet the needs of all segments of society; whether the institutions are no longer financially viable, excluding the poor, and obliged to undergo major changes; or whether the programmes have been removed from the hands of the churches by government decree. After a vigorous examination of these various circumstances faced by church-related programmes, the CMC formulated the following suggestions and recommendations:

A. Suggestions for Established, Economically Secure, and Continuing Church-related Health Programmes:

1. Where this has not yet happened, dialogue should be initiated with government health authorities with a view to assuring that these programmes conform to national health priorities and are fully integrated with the national health scheme at regional and local levels. Wherever possible, this should be carried out by unified mechanisms that are empowered to speak on behalf of all Christian churches and their programmes. Included here would be the existing CMC-related coordinating agencies.

2. Long-range planning in lesser developed countries should not consider further expansion of existing hospitals in size, scope or sophistication, except as a part of the national health plan and where government funds are designated for that purpose. The reasoning behind this is clear: springing from its Christ-inspired prejudice on

behalf of the poor and the deprived, the church should concentrate its efforts to make an appropriate level of care available to those who now have none, rather than focus on increasing the quality, variety and sophistication of care for those who are already well-served.

3. Involved Christians, congregations and churches should be encouraged to examine existing programmes to determine whether the greatest health needs of the people are being met, and whether the objectives of the church are being fulfilled through those programmes. Biblical and theological reflection would be an essential aspect of this re-examination.

4. Churches should search for additional ways to become involved in health-related development work. (See C below.)

B. Strategies for Church-related Medical Programmes Faced with Irresolvable Financial Problems or Imminent Government Takeover:

1. Accept the inevitable and prepare productively to move into new relationships.

2. For those institutions faced with a financial crisis, start positive negotiations with national health authorities for increasing government support and involvement with complete handover as an alternative. Again, where possible, this should be done through the single voice of coordinating agencies in order to achieve a distributively fair resolution for all programmes. Where such agencies do not now exist, means should be sought to bring the churches into collaborative relationships to achieve this corporate approach.

3. Where the government has no wish to accept increasing responsibility for a particular medical programme, a scaled-down reorientation of that programme should take place in order to make it financially viable and available to all who need its services. Where such an orientation cannot solve the continuing financial pressures, it may be necessary to close the institution. In all these cases, consideration should be given to redirecting the churches' energies into new ways of being involved in health.

4. For those institutions facing imminent government takeover, the leadership of the programmes, in close association with the national coordinating agency, should be prepared to actively engage the government in dialogue to ensure a smooth transition. Depending on the time allowed, this might take the form of progressive integration with increasing government assistance and participation, and continuing church involvement until the government assumes complete responsibility.

5. Each of the above circumstances opens up completely new avenues for service in the field of development work. (See C below.)

C. Strategies for New Ways for Continuing Involvement of the Churches in Health Care Concerns:

1. In this search for alternatives, the churches should consider concentrating their efforts on "the least of these", the poor, the oppressed, the rural, the remote, the urban slum dwellers, in short, the unserved.

2. *People* are the starting point, not professionals: people who are deeply rooted in the local community and congregation.

3. A complete and deep understanding of the root causes for ill-health in the community is an absolute prerequisite. This implies a very thorough understanding of the *local* concept of health. It also means that the starting point may be more fundamental than the need for water and sanitation; it may be issues such as land tenure, social injustice, unemployment and agricultural needs.

4. Resources are to be found with the people themselves, and the emphasis is on developing these resources to the benefit of the whole community. This kind of commitment requires a real motivational process as the foundation of development work.

5. The whole development process must be able to be sustained; hence, objectives must be realistic and home-based, locally creative and promoting self-reliance. There are no instant solutions, and it must be accepted that planning and implementation will take years to accomplish.

6. The churches may be able to continue to be involved in more "professional" areas such as training. Here, the effort might well focus on the training of "animators" or motivators for development, middle-tier project managers, field workers for development and agriculture, and appropriate types of community health workers. This would include developing the potential of the village midwives and indigenous healers. Governments could be encouraged to recognize the contribution that can be made by these more simply trained categories of worker.

7. The many coordinating agencies for church-related health work now in existence would gain an entirely new kind of life if they entered actively into this arena. Their relationships could well change so that the church leadership is given the decisive voice in directing agency affairs. The search for opportunities in development work and

the move to integrate agricultural and community work with health care could be effectively pioneered in a cooperative and coordinated fashion.

PRIMARY HEALTH CARE (PHC); PRESENT UNDERSTANDING, PROBLEMS AND A LOOK TO THE FUTURE:

The participants of this group were very conscious of the fact that primary health care has received a tremendous amount of exposure in conferences, seminars and medical literature. Hence, they did not attempt to redefine PHC; it was recognized that the basic philosophy of PHC is to meet the health needs of all segments of society, especially those most deprived of health care. By way of discussing the concept in further detail, the 7 principles of PHC elaborated by WHO were examined (see p. 54); the group felt that these continue to be valid and useful guidelines for the understanding of PHC.

The group also observed that the declared acceptance of the concept of primary health care is often not accompanied by an adequate understanding of the basic philosophy which underlies this approach to health problems. Particular note was taken of several aspects which seem to be poorly understood by many who promote primary health care. This applies particularly to the fact that other echelons of health services should be designed *in support of* the needs of the peripheral community activities; that PHC should be fully integrated with the activities related to community development; that the local population should be actively involved in both formulation and implementation stages; that available community resources must be relied upon and impose natural limitations to cost factors; and that the majority of health interventions should be undertaken at the periphery by workers most suitably trained for performing these activities.

The group recognized that, in practice, there are 2 components or sides to primary health care: the technical and the socioeconomic-cultural. A breakdown of some of the aspects of each component might look something like this:

Technical Aspects:

1. Simple curative services.
2. Maternal and child health (MCH) services:
   a) antenatal care, delivery and postnatal care,
   b) Under-Fives' Clinics,
   c) immunization and communicable disease control programmes,
   d) family planning activities,
   e) nutrition programmes.
3. Environmental sanitation.
4. Chronic disease control.
5. School health programmes.
6. Mental health programmes.
7. Follow-up and convalescent care at home.
8. Possibly industrial health programmes.
9. Supportive services and programmes:
   a) training and supervision activities,
   b) drugs and equipment supply and support,
   c) referral procedures for secondary and specialist care.

Socioeconomic-Cultural Aspects:

1. Community development components:
   a) agriculture and nutrition work,
   b) water supply,
   c) environmental sanitation,
   d) transportation,
   e) self-help projects.
2. Community participation and control components:
   a) the basic animation or motivation process for self-development and health concern,
   b) community health committees,
   c) community control of time schedules and financial aspects of PHC,
   d) health education (motivation, opportunity, awareness, support and the cultural dimension of family planning),
   e) health-related cultural patterns, such as family make-up and styles of life.
3. Economic components:
   a) land ownership,
   b) employment opportunities,
   c) economic opportunities in farming and home industry,
   d) financial resources available to the community.

The discussions on this conception of primary health care emphasized the need to consider the potential of all the people in the community and the design of activities which will release that potential. The usual pyramid representation of health care activities seems to imply a sharp cut-off between the primary level of health care and the general membership of the community. It was emphasized that this approach to health has deep roots in the sociocultural setting. By emphasizing this factor, it is hoped that the danger can be avoided which comes with thinking that if only one could get the PHC technology right, the problems would be solved.

In citing numerous examples of successful PHC programmes around the world which have contributed to this new view of primary health care, a number of observations were recorded which related to success in these programmes. These include: the degree of community participation at all levels; the presence of innovative aspects, such as links to agricultural or dairy cooperatives, mothers' clubs or

other facets of community life which provide motivational or financial support; the duration of operation; and the very important subject of leadership. The human aspects of leadership were particularly stressed, and the role of the charismatic leader was discussed. It seems clear that, if a strong leader does not combine his/her task with a meaningful degree of community participation and delegated leadership, then the concept is already blunted and its sustainability in serious doubt.

Problems in Primary Health Care:

1. COOPERATION WITHIN ALL SECTORS OF THE SOCIETY:

   In order to be successful, a primary health care programme should have the full understanding, support and cooperation of the community, the church, the professionals and the state. Securing this cooperation is often difficult. The doctors, nurses and other health professionals are often obstacles to the successful realization of primary health care programmes. Medical work is often peripheral to the mainstream of church and congregation. In many nations, the relationship of church medical programmes to the state is threatened by serious difficulties. Those in authority who look upon primary health care as a second-class effort, and who do not yet see the connection between development and health, are often unwilling to participate or cooperate in such programmes.

2. TRAINING AND RE-EDUCATION:

   The customary professional training system does not properly prepare the student for his/her role as a member of a health team which may be involved in primary health care. Unfortunately, the subject is not adequately dealt with in medical and paramedical training institutions. The atmosphere of excellence and specialization and the attractions of climbing the professional ladder make it difficult for most medical graduates to react positively to the PHC concept. All sectors of society need re-education in the principles of PHC, having been programmed to a crisis-intervention, curative system.

3. IMBALANCE OF TECHNOLOGICAL INTERVENTION:

   This is seen on 2 levels:
   - Present medical technology is unavailable to most of the people of the world, even to the poor in the countries where this technology developed.
   - In health programmes, the traditional emphasis on health technology has ignored the responsibilities of the community for its own health care. In industrialized countries, the basis of health – food, water, housing and waste disposal – are developed to the point where these considerations are no longer the conscious concern of the majority of people. In poor countries, this infrastructure does not exist, so the imposition of a transposed health technology is futile and immoral.

4. FINANCING IN PRIMARY HEALTH CARE: A NEW FORM OF OPPRESSION?

   Primary health care has become the new vogue in international health affairs. A wide variety of private, governmental and intergovernmental organizations are conferring and writing about, promoting and financing primary health care. Large conferences on PHC have been held, sponsored by medical societies, government aid agencies and the World Health Organization. A look at the conference calendar for the coming year indicates that this trend is accelerating.

   Massive funding specifically devoted to primary health care programmes and projects is being unleashed, and it appears that still more will become available. Moreover, the money is being imposed on systems and societies which are financially and administratively unable to cope with it. There is a real danger of destroying the basic concept of primary health care through this kind of imposition which can almost be viewed as a new form of oppression. Serious concern is now being expressed about the moral implications of regulating the inflow of large sums of money for primary health care in such a way that it would be a de facto "withholding of money from the poor". Introducing primary health care on a large scale and seeking to implement it almost immediately violates the very concept itself. There is no such thing as "instant primary health care". It should be allowed to grow up from the community and to mature over time. This requires skillful and compassionate guidance and a patient motivational process. A grant proposal may itself sow the seeds of destruction for a programme. Furthermore, primary health care programmes may create difficulties for existing health care programmes of other types by syphoning off funds from the latter and thereby undermining the efforts of these workers and losing their credibility in the community.

The participants in this group wished to express this note of warning and caution in the hope that the development of primary health care will remain true to its first principles and not become simply the new catch-word on the aid "band-wagon".

MAKING THE COMMUNITY DIAGNOSIS– THE POINT OF DEPARTURE FOR COMMUNITY HEALTH PROGRAMMES

by Dr Helen Gideon

This article was printed in CONTACT 40, August 1977.

"In most developing countries, leaders have not yet given much thought to a well-tailored answer to the needs of their people. Yet an independent diagnosis could be of more benefit than a borrowed remedy ..."

Dr T. Adeoye Lambo, Ibadan, Nigeria
Deputy Director General,
World Health Organization

INTRODUCTION

Community diagnosis is a comprehensive assessment of the state of an entire community in relation to its social, physical and biological environment. The purpose of this diagnosis is to determine problems and to set priorities for planning and developing programmes of care for the community.

The process of diagnosis is a continuous learning experience, both for the programme coordinator and the community. It enables him/her to adjust or alter the programme for optimum effectiveness. It allows the community to become gradually aware of its existing situation. It also enables the community to understand, at its own pace, the potential advantages of change, which eventually leads to alterations in attitudes, values and behaviour.

There are certain segments of community diagnosis that are hard measurable facts, such as age and sex distribution, occupation and literacy status, prevalence of diseases, land holdings, irrigational facilities, sanitary conditions, etc. Equally important are those aspects which cannot be measured, but need to be determined and borne in mind, such as the customs, beliefs, taboos, attitudes and values towards various situations. Furthermore, one needs to be aware of the overall organizational pattern of the community within which there are several sub-organizations (e.g., castes) with their own values and patterns of conduct. Each sub-organization is intricately interrelated to the other and to the overall community, thereby affecting its entire behaviour.

When considered in all its aspects, community diagnosis may seem an unassailable task, yet it is a simple process that develops gradually and only requires keen perceptiveness, observation and study of the facts obtained.

The diagnostic steps are more or less similar to those used in the identification of a disease in a patient. However, some fundamental differences exist. In the case of a patient, he is aware of a problem. He takes the initiative for advice and submits to whatever he is subjected to. The community, on the other hand, may or may not be aware of a need/problem. Rarely does the community as a whole take the initiative to seek advice for collective care. Nor can remedial measures be imposed. In fact, active collaboration is an essential requirement for diagnosis and programmes of care for communities.

Yet another difference is that the disease of a patient is invariably a pathological condition treated as a malady of the patient alone, often unrelated to his environment. The conditions identified in a community cannot be treated as isolated occurrences, as each one is linked to a host of other interrelated factors. For example, prevalence of malnutrition in a community not only calls for treatment of the people suffering from malnutrition, but also calls for attention to other matters such as food habits, inequality of land ownership, feeding practices, taboos, economic status, large or poorly-spaced families, inadequate agricultural practices, etc. These are some of the areas which would need attention if comprehensive care for malnutrition were to be undertaken.

SUGGESTED STEPS TOWARDS COMMUNITY DIAGNOSIS*:

I. Library Reconnaissance:

This is the study of what is known about the area. Information is usually available for a wider area

* The selection of a population is a topic on its own and is not considered in this paper. The suggested steps for community diagnosis are for a selected population willing and keen for active collaboration.

than selected. Facts about birth and death rates, type of land, type of crops grown, occupational patterns, literacy rates, etc., may be easily obtained.

Other than government offices, local voluntary agencies active in the field may have information that is useful. Occasionally, special programmes or research studies have been conducted in the area or similar areas. The results of these need to be studied for possible relevance and application.

II. Field Reconnaissance:

This involves field visits to the selected area to determine the specific local situation. There may be facts known but not recorded: e.g., an obvious prevalent medical condition, a local irrigational problem, a social problem. On the other hand, there may be strengths in a community or a richness in the environment which should be noted. Field reconnaissance calls for:

- informal meetings and discussions to allow the community to:
  - i) voice areas of interest/concern;
  - ii) determine the ways in which the community is dealing with the areas of concern/plans to deal with them/may be indifferent to them.

  An attempt should be made to establish what is possible with internal (local) resources and the extent to which outside intervention is needed.
- discussions with the community to explain the need for accurate data, such as the extent and severity of conditions "of concern" before planning and development of programmes.
- a search for ways in which such data can be obtained, seeking active community participation and the formation of working committees.

III. Surveys:

1. BASIC DEMOGRAPHIC SURVEY:

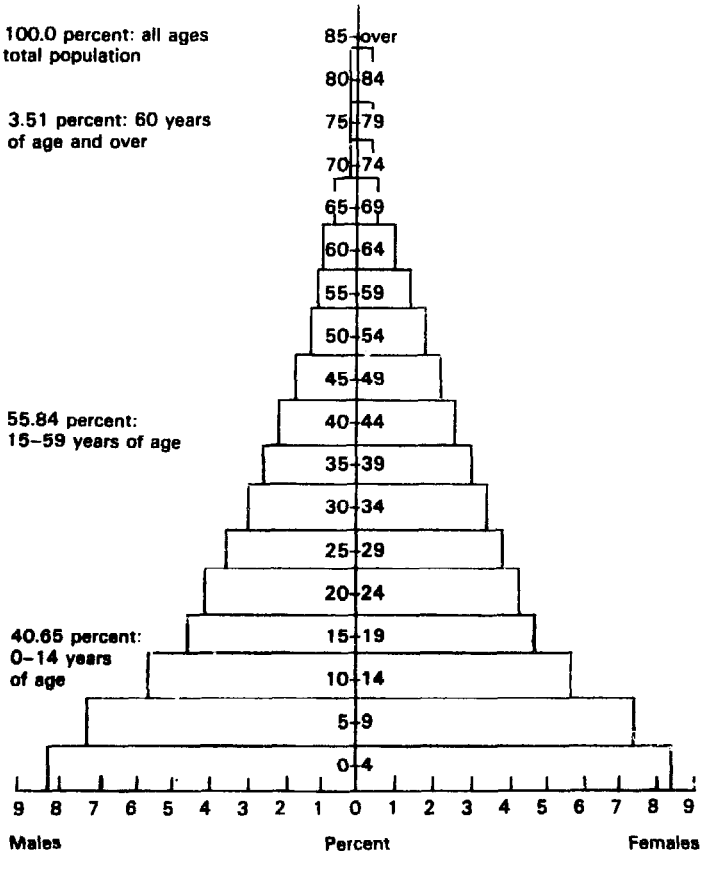
Most directors of community care programmes undertake a basic demographic survey to determine age, sex, occupation, literacy of a community. Such information is an excellent indicator for leads to community diagnosis, but, unfortunately, not every programme makes full use of such data. The following few points are made to illustrate the value of such data:

a) *The information about age and sex indicates* to a diagnostician probable lines of treatment. For example, if a married woman aged 30 has irregular bleeding, the physician considers the possibility of a threatened abortion. But if a woman aged 70 comes with the same symptoms, the physician will suspect malignancy.

Similarly, in a community, the age-sex distribution aids community diagnosis and indicates the programmes likely to be required. As an example, consider the population of Sri Lanka.[1] (Fig. 1*)

Figure 1

Population of Ceylon (now Sri Lanka) by Age and Sex (1955)



* This pattern of age and sex distribution is common in most developing countries.

would now consider necessary to achieve this shift of emphasis in health care delivery, we should be fully aware of the attitudes of our own medical profession at home, who are resisting exactly similar changes, and who appear intent only to pursue their own sectional interests.

We will not be concerned at this preliminary stage to recommend precise cures for the various ills outlined, only to suggest that it is unlikely that any real progress will be made in improving the health of the bulk of the population in the developing portions of the globe, until we exert similar energy and thought to our own problems, and can be seen to be applying the new standards to ourselves also.

PATTERNS OF DISTRIBUTION OF HEALTH CARE

Concentration in Centres of Excellence

It is very well known now that the major part of the health care effort in the Third World is concentrated in the large towns rather than in the rural areas where the majority of the population lives. This has led to the invention and acceptance of the phrase "rule of three quarters", by David Morley, who observed that "three quarters of the population lives in rural areas, yet three quarters of the health care effort is concentrated in urban areas..." etc.[2] However, a very patchy distribution is evident in the allocation of health care resources in England. Many of the most needy areas are very poorly supplied with resources, while the metropolitan areas of London, and the teaching areas of all the various health regions are well endowed with hospital facilities and staff.

Table 1

Resource Distribution Between Teaching and Non-teaching Areas[3]

Regional Health Authority	Hospital expenditure per capita (1971/2) (% difference from national mean*) Teaching Area		Non-teaching Areas
Mersey	Liverpool	+62	-17.5
South Western	Avon	+14	-24.3
Yorkshire	Leeds	+ 2	-11.7
West Midlands	Birmingham	+10	-29.0

In some rural areas, there is a shortage of resources that is similar to the rural areas of the Third World. The East Anglian region, which is mostly rural, has the poorest provision of health and social services in all England.[4] Total revenue allocation for hospital services is 17% per head below the average for the rest of the country. However, this shortfall is not evenly distributed within the region itself, and, once again, it is the rural districts that have the poorest provision of facilities. Expenditure in the urban teaching district (Cambridge) falls only 13% below the national average, while Kings Lynn and Great Yarmouth districts (both very rural) are each more than 51% below average. Capital expenditure per head of population between 1948 and 1974 has been over 6 times greater in the Cambridge district than in Great Yarmouth, and the present cost of running a single hospital in Cambridge (Addenbrookes) is almost as much as the *entire* health services budget for Kings Lynn and Great Yarmouth and Waveny health districts.

Table 2

Health Services Budgets in Three Districts 1975/6

	£ Revenue Allocation
Addenbrookes Hospital (678 beds including 178 regional specialty):	6,541,655
Kings Lynn Health District (population 167,300) all services:	3,542,295
Great Yarmouth and Waveny District (population 174,950) all services:	3,700,331

This maldistribution of resources is shown also by the ability of the various districts to attract hospital staff. Thus, while Cambridge has 0.76 hospital medical staff per 1,000 population and 5.46 hospital nursing staff, Great Yarmouth is able to provide 0.4 medical staff and 3.7 nursing staff per 1,000 population. The people living in the poorly supplied districts naturally have to put up with an inferior service. Table 3 demonstrates that the waiting lists are longer, and more have to travel outside their own district for hospital treatment.

Under the new thinking, shortfalls in provision of hospital resources are not necessarily detrimental, where they are compensated for by the provision of increased community facilities. In the Third World, it is frequently noticed, however, that exactly those areas which are most poorly provided with hospital facilities also have the most poorly developed community facilities. Exactly the same pattern can be demonstrated in the English health services.

The Emphasis on Curative Medicine

There can no longer be any serious doubt that the present amounts of money allocated to health

* The mean is the arithmetic mid-point between the highest and lowest figure.

Table 2

Community Diagnosis Based on Age/Sex Distribution
(Berlin 1946)

Observations	Diagnosis	Programme Indication
1. Low proportion of population under 5.	Low birth rate.	Less need for family planning programmes with less emphasis on maternal and child care programmes.
2. Population 0-14 years of age is 16.29%.	Lower proportion of dependent population as compared to Sri Lanka, possibly higher economic status.	Problems likely to be those of affluent societies.
3. Population 15-49 years of age is 63.67%. Imbalance of sex ratio, especially between 20-35 (result of loss of males in World War II).	Community with single-parent families; problems of teenage and young children. Problems of lonely adults. Fewer births.	Clubs for recreation and occupational facilities for adults. Child crèches. Youth clubs. Teenage activities.
4. Population 60 years of age and over is 18%.	High proportion of older people.	Programmes needed for geriatric problems.

suggested below for consideration and adaptation as necessary. (See Table 3.)

From such a record, it is simple to determine the total number of children under 5, the numbers in the child-bearing age and the older age groups.

b) *Information on the occupational pattern of a community* indicates economic status and occupational hazards to be expected. Moreover, one becomes aware of the community's pattern of life which indicates the hours of work and thereby the leisure time during which one can make contact with the people.

c) *Determination of literacy status* will indicate to the project coordinator the type and content of media required for communication in the development process.

2. SPECIFIC SURVEYS:

It is necessary to establish whether specific conditions observed, mentioned or indicated by surveys are problems in reality. To this end, special surveys are required for final diagnosis.

The surveys can be on a sample basis if the population is too large and/or if resources are limited. The process involves responsible partici-

Table 3

Census Record												
House No.	Number of families	Age & Sex										
		Under 5		5-14		15-44		45-64		65+		Total
		M	F	M	F	M	F	M	F	M	F	
1	1	1	1	1	1	1	1					6
	2			3	1		1	1				6
2	1					2	1		1	1		5
3	1		2	1		1	1					5
Total	5	1	3	5	2	4	4	1	1	1		22

Table 4

Objectives of, and Possible Community Diagnosis from, a Community Survey

The objectives of a specific survey:	**Possible community diagnosis** (not exhaustive):
1. To ascertain the extent to which a problem affects the people.	1. One third of all children under 5 are malnourished. Prevalence rate: 33% of children under 5 are malnourished.
2. To assess resources available for remedial action.	2. Milking animals in community. Vegetables, sugar-cane and peanuts grown. Poultry farms. Space available for kitchen gardens in most homes. Active youth clubs.
3. To locate persons or groups interested or opposed to the solution of the problem.	3. Labourers interested, specially for supplementary food. Landowners opposed: they are well-to-do and believe the children are well fed.
4. To examine difficulties to be overcome.	4. Inadequate diet/diet habits of low and high castes. Vegetables, milk, eggs, soid not eaten. Peanuts and Jagari (cane sugar) considered harmful. Belief that a child can only be given breast milk until teeth have erupted. Poor economic state. Closely-spaced children. Malnutrition not recognized.
5. To find possible, feasible remedies.	5. Health education: demonstration of value of peanuts, and other available food. Advising certain items of food permissible before teething. Education for recognition of malnutrition. Family planning for greater spacing. Determine ways of greater income by improving technology of occupation: introducing crafts and feasible training.
6. To determine adequacy or inadequacy of other agencies in area to deal with the condition.	6. Local government health centre from which supplementary food can be obtained. Primary health care can be given at centre. Local practitioner, non-allopathic, could collaborate. Untrained midwife could be trained.

pation and involvement of all sectors of the community, coordination of efforts and development of cooperative working arrangements in order to understand, identify and resolve problems, and to make intermediate and long-range plans to achieve goals.[3]

The objectives of a specific survey can be illustrated by Table 4.[4] During field reconnaissance, malnutrition in children was observed. After discussion with the community, a survey was undertaken.

These observations lead to a community diagnosis which, in turn, calls for a programme of community care. Some steps for implementing such a programme are listed below.

1. Discuss, suggest, plan steps for a method of work by which a feasible solution can be applied to identified problems.
2. Set intermediate and long-range plans.
3. Develop operational procedures involving the community.
4. Consider a time period when effectiveness can be measured.
5. Determine an educational process for the workers and the community.

IV. Attempts to Comprehend Community Behaviour:

Certain areas of community diagnosis, such as community organization, attitudes, beliefs and values, are difficult to measure, but they are of

vital importance, and the task is essential, because the behavioural pattern of the community depends upon them. Special preparation is required to create an awareness of these areas. When problems identified by surveys have been listed and priorities and feasibility established, programme plans can then be considered. Information concerning attitudes, beliefs and practices is required for each activity proposed. To obtain this, social calls should be planned to representative groups. For example, if in the selected population 50% of the people belong to farming families, 25% to schedule castes and 25% to other castes, then the plan should be, if possible, to pay social calls in the same proportion, i.e., if 20 calls in all are to be made, then 10 should be to farmers, 5 to schedule castes and 5 to other castes. Such information cannot be obtained by regular surveys; it is best done by social calls paid to members of the community at their leisure. The conversation should be listened to with patience and gently guided to areas of concern.

The following questions are examples of how information may be obtained in order to determine beliefs, attitudes and practices.

a) Weaning diet: At what age do mothers in this village give babies foods other than breast milk? What do they start with? Do landowners/labourers do the same? Do you think this is the best? Did you do the same? Do you know some mothers give babies mashed vegetables as early as 4 months? What do you think of that?

b) Attitude to family size: What is considered a small family (too few children)? Why? What is considered a large family (too many children)? Why? What would you consider the "right" size?

c) Attitude to specific medical condition detected, e.g., tuberculosis/leprosy: In this village some families have cases of tuberculosis/leprosy. How is it that these families got this disease? Could they have avoided getting it? Do you think they need attention? Where? Have they sought/accepted it? Why not? Would you feel that other members of the family are likely to get this disease too? Is there any way to prevent this?

Attention is drawn to a few points:

- The above are simple, pre-planned guidelines for direction of conversation.
- Interviews should be conducted by a responsible person who does not attempt to interpret what is said, and yet has a sensitive ear to note relevant information given but not asked for.
- Record keeping or taking notes during a visit often mars the atmosphere of a social call, and genuine responses are not obtained. Diligent recording after each call is therefore recommended.
- If more than one person is conducting such surveys, some standardization needs to be established for comparison.
- Accumulation of irrelevant data serves no useful purpose. The only information required is that which can be used for concrete action.

As one can see, the steps suggested for community diagnosis are similar to those required for patient diagnosis.

SUMMARY AND CONCLUSION

Steps Towards Community diagnosis:

1. Library reconnaissance.
2. Field reconnaissance.
3. Survey (a) basic demographic survey,
   (b) specific survey.
4. Community behaviour.
5. Diagnosis.

Comparable Steps Towards Patient Diagnosis:

1. History taking.
2. Symptoms and probing for greater detail.
3. (a) Basic data for diagnosis leads,
   (b) Examination and investigations.
4. Other factors affecting patient.
5. Diagnosis.

Batten and Batten quite rightly say: "A community development worker may need to acquire technical skills, but his primary and basic skill is working with the people. This is a particularly difficult and complex skill to acquire — no one community or group is quite the same as the other. One lesson is that in field work it is the people, not the worker or his agency, that is in control."[5]

Community diagnosis is a much greater challenge than patient diagnosis. For those that accept the challenge of learning and developing themselves as well as the community, the job satisfaction is immeasurable.

BIBLIOGRAPHY

1. Thompson W.S., Lewis D.T. *Population Problems,* Tata McGraw-Hill Publishing Co Ltd, Bombay, 5th ed, 1965.
2. Wyon J.B., Gordon J.E. *The Khanna Study,* Harvard University Press, Boston, 1971.
3. *Health : a Community Affair — Report of the National Commission on Community Health Services,* Harvard University Press, Boston, 1966.
4. *Fact Finding with Rural People — A Guide to Effective Social Survey,* prepared by Hsin-Pao Yang, FAO Agricultural Development Paper No 52, 4th ed, 1962.
5. Batten T.R., Batten M. *The Human Factor in Community Work,* Oxford University Press, Amen House, London EC4, 1965.

CHAPTER XIII

DEVELOPMENT OF A COMMUNITY HEALTH PROGRAMME

by Ms Mary Johnston

This formulation of the steps necessary to develop a community health programme is based on Ms Johnston's considerable experience in the "Dana Sehat" programme in Central Java, Indonesia. "Dana Sehat" means health funds and the programme is based on the concept of a community development programme, built upon a health insurance scheme. Further details on the Dana Sehat programme were given in CONTACT 31 "Community Health Care in Rural Java" and in an article by Dr Gunawan Nugroho in the WHO book "Health by the People", 1975. The following outline was first printed in CONTACT 43, February 1976.

INTRODUCTION

Much has been written over the past few years about the necessary components of Primary Health Care, or Community Health Care. Among these, the participation of people in the planning process, in identifying needs, setting priorities and carrying out the programme has long been recognized by health planners and development planners to be perhaps the most essential.

It is now recognized that making a community diagnosis is an essential process in determining which health problems require the major attention of a health programme and which population groups are most at risk. But many questions continue to be asked about *how* to secure the expression of the entire community of its needs and the priorities to be set within those needs. What steps are necessary in order to mobilize the community for its maximum involvement in all stages of the programme?

MAJOR STEPS

A. Promotion With the Government

B. Consolidation of the Health Staff

C. Approach to the Community

D. Social Preparation of the Community

E. Field Preparation

I. Selection of Initial Project Area

II. Collection of Data about the Community

III. Determination of Problems to be Tackled and Setting Priorities

IV. Planning Programme Implementation

F. Implementation of the Programme

G. Monitoring

H. Assessment

I. Revision

J. Expansion of Established Programme

K. Extension of Programme to Other Communities

L. Promotion and Training in New Area and Repeat of Whole Process in New Community

A. PROMOTION WITH THE GOVERNMENT

- How can a doctor gain acceptance from peers and supervisors for ideas of experimentation with a community-oriented health programme?
- How can such a programme be integrated into the overall government programme?
- How can the doctor avoid friction with senior officials if the programme is eventually more successful than their programme?

→ *Government support must be gained in the initial stages of a programme.*

Purpose

1. To gain official support for the proposed programme.
2. To recruit government resources, including technical advice, facilities and funds.
3. To gain support from other disciplines at the same, or higher, levels in order to develop a comprehensive programme.

4. To integrate the programme into the government programme and prevent overlapping and competition.

Action

Discussion with senior government officials until some consensus is reached on concept of community health, and the idea to set up a community health programme in a specific locality is approved.

Information Needed for Successful Action

1. Current government health policy, including opinions and statements from senior officials and international sources, on community health.
2. Overall plan of implementation should include ideas on:
   - organization/framework within which programme will be developed,
   - financial aspects,
   - advantages over current system, e.g., wider coverage, more economical use of staff, cheaper. (In discussing advantages, factors of special interest and importance to the government officials should be emphasized.)
3. Criteria for the selection of locality for trial should include the following:
   - the community to be served should be manageable, viable and, preferably, an established administrative unit such as a village or kampong;
   - the unit should have economic potential;
   - it should have strong, active, honest leadership;
   - it should be strategically placed to enable expansion to other areas.

B. CONSOLIDATION OF HEALTH STAFF

- How will staff who have worked for years in a curative service accept a programme with a new orientation?
- How can a doctor secure the support of the rest of the health team for a new programme? No doctor can implement a community health programme alone.

→ *It is important to consolidate the staff of the health service.*

Purpose

1. To prepare the health staff for a programme oriented to the community.
2. To provide the staff with skills required for community work.
3. To form a cohesive team.

Action

Retraining the staff of the health service, including, if necessary, its reorganization.

Information Needed for Successful Action

1. On forming an effective team.

   A team which understands and accepts the new approach and feels confident in implementing it is needed. The team may consist of:
   - a doctor, or other team leader,
   - paramedics, and nursing staff,
   - social worker, and
   - agriculturalist (or other technical worker, depending on local community needs).

   If it is not possible to increase staff, current staff can perhaps be equipped with extra skills.
2. On training content and methods.
   i. Training should achieve changes in attitudes, through:
      - statements proving government interest in, and support of, new orientation;
      - proof of need for new orientation, e.g., clinic statistics indicating limitations of existing service, reasons for non-attendance at health service, etc.;
      - contact with community health workers;
      - visits to successful community health programmes.

   ii. Training should provide skills in:
      - approaching the community,
      - communicating with the community,
      - working together with the community,
      - planning,
      - maintaining and developing a programme,
        and
      - simple administrative skills.

   iii. Training methods could include:
      - discussions,
      - exposure to situations followed by reflection on the situation,
      - problem solving, and
      - role playing, etc.

C. APPROACH TO COMMUNITY

- How can a health programme become a community-based programme?
- How can a doctor help the community to tackle its own health problems?

→ *It is important that the community be approached in the very early stages of development of the programme. Close cooperation between the health service and the community is essential.*

Purpose

To gain the support and the direct, active participation of the community in developing the programme.

Action

Health worker approaches the community leader

or

Health worker is approached by the community leader. (This is only likely to happen in a community where a successful programme has already been established in the vicinity.)

Information Needed for Successful Action

1. For the identification of a sympathetic community leader, criteria should include:
   - interest in health,
   - active interest in community welfare,
   - innovative ideas, and
   - influence in community.
2. Method of Approach.

   Discussions should focus on:
   - particular issues, events occurring in community (death, epidemic, special day);
   - statistics from local clinic (high disease incidence, disease patterns); and
   - examples of programmes in other areas.

Important Factors

1. Official approval of local leader is prerequisite.
   If a direct approach to formal leaders is not possible, or unsuccessful, informal leaders, e.g., teachers, religious leaders, may be approached. When they are convinced about the new ideas, they can be encouraged to influence the formal leadership.
   A government superior (e.g., a district head) may be the needed contact person in other cases.
2. It is unusual for the initiative in setting up a health programme to be taken by the community. But where this occurs and the existing health workers are unresponsive to approaches from village leader, the help of a more senior official, e.g., senior doctor, senior government official, coulb be requested to convince the health worker, through discussions and visits to successful programmes.

D. SOCIAL PREPARATION OF THE COMMUNITY

- How can the whole community (as opposed to leaders only) participate in programme development?
- How can a health worker make contact with members of the community? What channels can be used?
- How can the health worker avoid the danger of arousing a feeling within the community that their cooperation is desired merely to further the ambitions of the health worker?

→ *Social preparation of the community is crucial to the success of a programme.*

Purpose

1. To develop community understanding of the basic aims of the programme.
2. To encourage the community to reach a decision to implement a programme based on its particular needs.
3. To mobilize local resources.

Action

1. Informal individual and group discussions about community problems and needs and the proposed community health programme, held between health worker and leaders in the community.
2. Community leaders, assisted by the health worker, then introduce the idea of the community health programme, informally and through community groups and meetings, to community members.
3. Discussions should be held until a decision is reached by community leaders and community members (if possible) to implement the community health programme.

Information Needed for Successful Action

1. Influential community leaders include:
   - formal leaders, e.g., government, traditional, religious; and
   - informal leaders, e.g., religious, educated, wealthy, political.

   The support of both formal and informal leaders is important.
2. Existing "effective" community organizations have:
   - ongoing activities,
   - membership representing the whole community,
   - sound leadership, and
   - a flexible programme.

   Approach should be made to such organizations as the community health programme could possibly be inserted as the programme of one of these organizations.
3. Research to identify community problems and needs may include investigations on:

   Health:
   - general observation, especially of deficiencies, including malnutrition, particularly in the under-fives' group;

- noting major illnesses as recalled by members of the community (and indicative of the high incidence of certain diseases);
- collecting data on number and causes of deaths and incidence of epidemics (or threat of);

Education:
- asking local teachers about their problems;
- comparing number of school-age children with number of school attenders;
- checking drop-out figures and reasons;

Transport/Communication:
- checking distance from nearest market, school and other important facilities;
- checking means of contact with, and transport to, secondary health care facilities;

Agriculture:
- comparing yields with expected average yields of area;
- asking farmers for their opinions of problems and needs;
- observing general conditions in the field.

4. Customary ways in which the community solves problems.

   When obtaining information about major needs and concerns, also ask about ways in which the community has tried to meet these needs. Possibly the customary ways of solving problems can be developed and incorporated into the new programme.
   E.g.: If a community collects funds to cover funeral expenses, this could be developed into a simple insurance scheme in which subscriptions are collected to provide health care for the living.

5. Methods by which the community reaches decisions.

   a. Determine which groups/group leaders are most influential in the community as they are the best channels through which to gain community support.

   b. Determine which is the officially recognized decision-making body/committee through which the final decision for acceptance of the programme should be made.

   c. Determine the type and frequency of group meetings. If the decision is reached in a formal meeting attended by a large proportion of leaders and community members, it will have stronger backing and support.

   d. Determine whether decision making is:
      - a decision by the recognized leader,
      - majority vote, or
      - discussion culminating in unanimous decision. Whichever decision-making method is used, it is important that as many community members and leaders as possible understand and agree with programme.

Important Factors

1. The health worker must have an open, friendly attitude, indicating willingness to learn about the community from the people.

2. The introduction of the proposed programme should always be through discussions on major concerns of the community. Through discussions, assess what these are and start there.
   E.g.: A volunteer health promotor programme could be suggested as an answer to the problem of long distances from the health service.

3. In a community where health is not a major priority, e.g., a poor, isolated community, implementation of a health programme may have to be postponed until other more pressing needs felt by the community are met.
   E.gs.: An agricultural programme which raises crop yields may provide the community with the economic means enabling them to use the proposed health service.
   Non-formal education may increase awareness and understanding of the advantages of healthier living.

4. NB: At this stage the community health programme is accepted in principle only. Details of the programme have not yet been worked out.

E. FIELD PREPARATION

→ *Joint preparation of the field, including selection of a limited area for trial, collection of data, determination of priorities, and planning is important.*

E. I. SELECTION OF INITIAL PROJECT AREA

- How can a community be convinced that a programme is feasible and of benefit to them?
- How can ideas be tried out without their failure jeopardizing the whole programme?
- How can programme implementors gain confidence from experience?

Purpose

To select a restricted area, with high probability of success, for trial.

Action

Community leaders and health worker reach a decision on locality for trial programme.

Information Needed for Successful Action

1. Nature of appropriate locality.

   The site most conducive to successful implementation would be:

– an existing community, preferably a small administrative unit, e.g., sub-hamlet or village;
– manageable in size;
– an economically viable community; and
– one with good leadership.

(In subsequent development of the programme in other areas, weaknesses can be overcome by many means, e.g., an economically weak unit could be combined with a vigorous and thriving village.)

2. Nature of local leadership.

The leadership of the trial unit should be:
– authoritative,
– honest,
– actively interested in the welfare of the community, and
– supported by the community.

(In subsequent development of the programme, weak leadership can be overcome by many means, e.g., by working through strong informal leaders with formal leader as figure-head.)

E. II. COLLECTION OF DATA ABOUT THE COMMUNITY

- How can the community and health worker learn more about local conditions?
- How can a programme be based on real and felt needs of a community?

Purpose

1. To provide baseline data.
2. To enable local leaders to become more aware of conditions in their community.
3. To increase the awareness of the community of problems facing them.

Action

1. Prepare simple questionnaire suited to local needs and adapted to the skills of the interviewers.
2. Inform leaders of the purpose of the questionnaire and reason for collecting data.
3. Selection of interviewers, preferably from the community.
4. Training of interviewers.
5. Data collection.
6. Tabulation and analyses of data.

Information Needed for Successful Action

1. Community to be covered.

It is important to collect data from the whole community if conditions are favourable. However, if community to be covered is too large, sampling methods should be used. These methods can be studied in a handbook on surveys.

2. Content of survey.

The data should cover both the community in general and individual families.

On community, items such as number of families, average family size, public facilities and vital statistics, should be covered. On families, information on factors such as number in family, ages, education, occupations, income, health status, environment, mother and child care, agriculture and social customs should be included.

3. Method of composing questionnaire.

- Questionnaire should be short and seek only information which can be used either directly for programme planning, or as an indicator of success for the monitoring of the programme.
- Ensure that the questions have one meaning only and will bring the answers required.
- Ensure that questions are not suggestive of a particular answer.
- Ensure that answers are given in a way which is easily tabulated, e.g., by using simple indicators, such as + = good; ± = fair; – = bad.

4. Selection of interviewers.

If possible, community members should do the interviewing. Choose community members with:
– ability to approach fellow community members,
– ability to ask questions honestly and record answers accurately, and
– interest in programme and time to spare.

If volunteer health workers have been formed before collection of data, this task should be given to them to increase their awareness of community conditions, and to provide a basis for them to plan their programme.

5. Content and method of training interviewers.

Training should include:
– reasons for asking questions in questionnaire,
– guidance on how to explain need for data collection to community members,
– guidelines for interviewing techniques, including information on how to:
  - create an open, friendly atmosphere,
  - ask open and closed questions,
  - prevent bias in answers, and
  - cross-check answers, and
– instruction on how to fill in questionnaire.

Training methods could include: discussion, role play, trial run followed by discussion of problems.

6. Method of collecting data.

   a. Coverage: The capacity of one interviewer in a rural area where homes are widely separated is, at a rough estimate, 10 families a week;

   b. Timing: Home visits should be geared to times when community members are at home;

   c. Supervision: Supervision of interviewers is important to maintain their enthusiasm and increase validity of data. Such supervision should include spot checks of difficult questions, close recording of time taken in interview, number of interviews conducted, etc. Each interviewer should keep his/her own records. Daily discussion of results is helpful for increasing skills.

7. Method of tabulation.

   Tabulation can be done by community members with guidance from health workers. Response frequency for each question should be counted and tabulated.
   Respondents can be divided into groups based on employment, size of family, education of parents, or other relevant factors.

8. Method of analysis.

   Each item in the tabulation can be evaluated according to simple criteria, such as: good/bad, sufficient/insufficient, satisfactory/unsatisfactory. Those items assessed as bad, insufficient and unsatisfactory are raw material on which to base plans for programme.

Important Factors

1. Data collection is important, but if problems arise (e.g., suspicious community leader, suspicious community members, inappropriate timing), data can be collected in stages as the need arises for specific programmes (e.g., under-fives' programme, environmental improvement programmes).

2. Data collection could also be postponed until volunteer health promotors have been formed.
   Advantages of using volunteer health promotors:
   – they are known by the community,
   – have an intimate knowledge of the community,
   – can gain increased awareness of problems, and
   – can obtain data for planning their programmes.

   NB: It is especially important to safeguard bias if health promotors or other local people are used.

E. III. DETERMINATION OF PROBLEMS TO BE TACKLED AND SETTING PRIORITIES

- How can a community set priorities in the face of a large number of problems?
- How does one select the "right" initial activity?

Purpose

1. To initiate a dynamic programme.
2. To select a small-scale, low-cost activity which will produce quick results.
3. To provide stimulation for continuing development of the programme.

Action

1. Presentation of survey results to community leaders and community members (if possible).
2. Determination of priorities and of initial activity.

Information Needed for Successful Action

1. Reporting survey results.

   Survey results should be reported back to the community in a form understandable to them. A descriptive, non-technical form highlighting problems and also potentials may be most effective. If possible the report should be made both orally and in writing. The oral presentation to community leaders, both formal and informal, provides a good opportunity for discussion of major community problems, both those in the report and those felt by the community.

2. Criteria for determining priorities to be considered.

   Four simple criteria can be considered:
   – What is the incidence of the problem in the community?
   – How serious is it as a health problem? (Opinion of health worker)
   – What importance does the community place on the problem?
   – How difficult is it to overcome? (Management considerations).

   The health worker together with the community can make a simple analysis of results by evaluating each problem according to the above criteria using a scale of 0-3. The scores are then multiplied to gain final score. Priorities are determined, the problem with the highest score gaining first priority.
   As far as possible, the key members of the community should be involved in determining priorities. Their involvement in all decision making will increase the validity of the decisions and increase their commitment to the programme. Both short- and long-term priorities should be determined to provide the vision of a continually developing, comprehensive programme.

3. Criteria for selecting initial activity:

   – low cost,
   – limited to small, feasible size,
   – ability to produce results within ± 6 months.

Using these criteria, plans should be realistic and within the scope of the community. Hence success will be maximized, resulting in a relationship of trust and confidence between the community and the health worker.

It is important also that the initial activity should stimulate further activities, leading to a more comprehensive programme, e.g., that a nutrition programme might stimulate improvements in agricultural techniques, or a savings programme stimulate small productive activities.

E. IV. PLANNING PROGRAMME IMPLEMENTATION

- As experience is an invaluable teacher, how can members of the community acquire skills in planning and management through experience?

Purpose

1. To make plans acceptable to both the community and health service.
2. To involve all parties in planning and implementation.
3. To increase community skills.

Action

1. Meeting of community leaders, community members (if possible) and health worker to make plans for implementation, on invitation of community leaders.
2. Setting up committee and administration, including a division of responsibilities.

Information Needed for Successful Action

1. Existing organizations in the community.

   If possible, the programme should be set up through existing organizations.
   If necessary, these could be reactivated, given new functions, etc.
   Only when this proves impossible should a new organization be created to carry out the programme.

2. Type of framework for programme.

   Examples of possible frameworks within which to set up a programme are as follows:

   a. A simple health insurance scheme can provide a framework for developing a comprehensive community health programme, e.g. environmental improvements, credit union, volunteer health promotors, under-fives' weighing, etc. can all be built into the framework as community awareness increases and needs arise.

   b. A volunteer health promotors' programme could also provide the framework for similar activities, as well as improved use of home gardens, under-fives' nutrition programme, health posts, etc.

F. IMPLEMENTATION OF THE PROGRAMME

- How can the community best be made aware of its own strengths and resources, and encouraged to use those resources?

Purpose

1. To carry out plans efficiently with active support and participation of the community.
2. To mobilize local potential and resources.
3. To develop management and other skills in the community.

Action

Community leaders, committee and health worker meet to discuss the implementation of plans, including steps, timetable, division of tasks, manpower use, etc.
(This may take several meetings.)

Information Needed for Successful Action

1. Simple methods of planning and management.
2. Methods of conducting a meeting so that those present contribute and plans stem from joint discussion.

   Preferably these meetings should be called and led by the committee. If there is a division of responsibilities amongst the members, all will have a meaningful contribution to make to the meeting.

3. Resources available within the community and those from without the community (if required).

   These include: materials, equipment, funds, skills, technical knowledge and personnel.
   Data collected in initial stages should provide details on resources within the community.

Important Factors

1. Plans should only be carried out *after* the community is prepared, i.e., after social preparation and field preparation are completed.
2. The community leaders and members should be responsible for making the plans, not the health worker.
3. The role of the health worker is:
   - to assist the committee in considering problems which may arise during implementation,
   - to provide technical information, and

– to "prod" the committee (if needed), e.g., if committee chairman "forgets" to call a meeting.

G. MONITORING

- What should be done if action planned together is not implemented?
- How can the community closely follow the progress of a programme?

→ *Ongoing monitoring of the progress of activities is important.*

Purpose

1. To follow the progress of implementation of plans.
2. To study the relationship between input, output and impact.
3. To stimulate the community through continual feedback.
4. To revise methods, if necessary.

Action

1. During implementation of the programme, progress is monitored by trained community members.
2. The community, community leaders and health worker meet periodically to discuss the results of the monitoring.

Information Needed for Successful Action

1. Simple methods of monitoring.

   It is essential to work out a simple recording system which is meaningful to the community, and can be kept by community members. Community members should be trained in the use of the system.

2. Effective ways to provide feedback of information.

   The opportunity must be provided for the community to receive regular reports of progress, e.g., at community meetings, at regular committee meetings, through poster displays.
   Informal contacts with community leaders should also be used for feedback of information about the programme. Both formal and informal contacts provide an opportunity for the community to give feedback to the committee on reasons for success or failure to progress.

H. ASSESSMENT

- What steps should be taken if a programme becomes static because the community loses interest and no new ideas arise?
- How can the community assess the results of its programme?

→ *Assessment of end results of activities is important for programme development.*

Purpose

1. To assess whether results of activities within the programme are satisfactory and meeting the aims of the programme.
2. To stimulate the development of other activities.

Action

1. Community leaders, committee and health workers meet for discussion of results of activity. (In a long-term programme, these meetings are held periodically.)
2. Community meetings are held by community leaders where results of assessment by committee are discussed, and ideas on expansion of the programme based on results of assessment are developed.

Information Needed for Successful Action

1. Simple method of assessment.

   Criteria for measuring progress could include:
   – change of disease pattern,
   – infant mortality rate,
   – incidence of illness in community,
   – improvements in environment,
   – increased community participation in health programme,
   – community's use of service (accessibility and acceptability), and
   – effectiveness of service (cost and benefit).

   Data on results achieved through programme is compared with baseline data collected in initial stage of programme.

Important Factors

The assessment must help the community to understand the results of their programme.

Therefore:

1. Community leaders (and if possible community members) should be involved in making the assessment. (E.g., the monitoring records could be used.)
2. The assessment must be prepared and presented in a form understood by the community.
3. The assessment must be reported back to the community members.

I. REVISION

NOTE: This step is only necessary if assessment reveals that an activity is not meeting programme objectives, or programme objectives are not meeting community needs.

→ *It is important to maintain a dynamic programme which meets the changing needs of the community.*

Purpose

1. To increase the effectiveness and efficiency of the programme.
2. To reorganize the programme to meet the needs of the community more closely.

Action

In a meeting of the community leaders, committee and health worker, decisions are made on the need for revision and methods of revision.

Information Needed for Successful Action

1. Aspects needing revision.

   These will be evident from the results of the monitoring and assessment.

2. Alternative activities which are more appropriate.

Important Factors

A community is never static; community needs are continually changing. Therefore a flexible programme is required, and programme implementors must be openly willing to change and revise programme as needed. A programme should be dynamic, never static.

J. EXPANSION OF ESTABLISHED PROGRAMME

- How can the causes of problems be attacked? For example, the community not only collects blood samples to detect malaria infection, but also works towards the eradication of mosquitoes.
- How can the community reach the goal of healthier living?

Purpose

1. To improve the quality of the programme, through expanding the number and type of activities.
2. To meet health needs of the community more adequately through a comprehensive programme.

Action

In periodic meetings, possibly at the same time as assessment, community leaders, committee and health worker, propose, select and plan further activities.
(This meeting is preferably called by community leaders.)

Information Needed for Successful Action

1. Methods of motivating community leaders and members to propose new activities may include:
   - visits to more advanced programmes;
   - development of a new activity in a limited locality, followed by encouragement of satisfied community members to stimulate other localities to follow their example; and
   - competitions.
2. Ways of encouraging community members to take more initiative should be based on increasing their awareness about their community and its problems.

   This can be achieved by:

   i. Training selected community members as volunteer health promotors so that they will have a deeper and more critical understanding of the causes of health problems and ways to overcome them.

   ii. Using important events to stimulate action, e.g., Independence Day preparations could include work on environmental improvements.

   iii. Using dramatic events, e.g., an outbreak of an epidemic or a death, to increase awareness and stimulate action to prevent a further occurrence of the same problem.

Important Factors

Before implementing any new activity, it is essential to repeat the steps of social preparation and field preparation.

K. EXTENSION OF PROGRAMME TO OTHER COMMUNITIES

- How can other communities benefit from the experience gained earlier by an established community health programme?
- Who is responsible for the development of a community health programme in other communities?
- Who can find time to work with other communities, given the limited resources available?

Purpose

To motivate leaders in other communities to adopt a community health programme.

Action

Exposure of key people from other communities to the original programme.

Information Needed for Successful Action

1. Media for promoting contact with other communities could include:
   - i. Observation visits to original programme.
   - ii. Contact between leaders of a community which has not yet begun a programme with experienced leaders of the community health programme.
   - iii. Government channels, e.g., introduction of programme at meeting of formal community.
   - iv. Mass media.
   - v. Audio-visual aids, e.g., filmstrip describing community health programmes.
   - vi. Public meetings, e.g., seminars, workshops.
   - vii. Printed brochures, manuals and other materials.
2. Early interest and motivation can be reinforced by the following:
   - government instruction which provides backing for the programme. To avoid negative effects of instruction from above, the community should be prepared to receive it;
   - provision of more detailed oral and written information, e.g., full description of how to implement programme.

Important Factors

1. This step may be carried out only when the initial programme is firmly established, i.e., when:
   - the community feels they are profiting from the programme,
   - community leaders and members are able to relate their experiences, and
   - intensive supervision is no longer required.
2. It is preferable that communities take the initiative in beginning the process of developing a programme in their area.

L. PROMOTION AND TRAINING IN NEW AREA, FOLLOWED BY REPEAT OF WHOLE PROCESS

- How can limited resources best be used to equip others to develop a satisfactory programme?
- How can the initiators of a new programme learn from the successes and failures?

→ *A newly developing programme can benefit from the experience gained through an existing programme.*

Purpose

1. To establish the programme in the new area on a firm foundation.
2. To provide a basic understanding of the philosophy and broad content of the programme.
3. To share information on setting up the programme in a new area.
4. To encourage the development of a flexible, dynamic programme related to local conditions and needs in the new area.

Action

1. Community leaders and/or health workers in new area commence promotion with the government and approaches to the community.
2. Training of key people from new area, including community leaders and health workers.

Information Needed for Successful Action

1. On identity of key formal and informal leaders.
2. Appropriate training methods and content.

   Trainers should be people with experience in existing programme, including health workers, community leaders, volunteer health promoters. The curriculum and organization of the training should be determined by trainers and trainees together, based on needs of trainees. Training material should include basic philosophy and broad outline of programme only, as it is important that the details of the programme should be determined by the local community, according to local conditions.

Important Factors

1. It is important to be aware of the disadvantages which could arise from using a programme as a training field, and attempt to forestall them. Possible disadvantages could be: oversaturation of the field; jealousy from other areas which are not used for training; or development of excessive pride and self-satisfaction resulting in an inability to receive any new ideas from outside.
2. The training is followed by social preparation, field preparation and all the subsequent steps outlined above.
3. Continuous contact between those involved in the existing programme with those developing the new programme is valuable to both parties.

POSITION PAPER: NON-GOVERNMENTAL ORGANIZATIONS AND PRIMARY HEALTH CARE

This paper was prepared over a 2-year period by a group of non-governmental organizations (NGOs) involved in health care, for presentation at the International Conference on Primary Health Care, organized by WHO and UNICEF and held in September 1978 at Alma-Ata, USSR. It was published (in the 6 main languages used at the Conference) in June 1978 by the World Federation of Public Health Associations, presented at Alma-Ata, and subsequently reproduced in CONTACT 48, December 1978.

INTRODUCTION

This paper presents the concern and involvement of non-governmental organizations with issues of health and development. It identifies the range of that commitment and what is needed to translate it into action. It is, however, neither a definitive description nor a complete list of all the programmatic aspects of primary health care. Instead, it identifies aspects now requiring greater emphasis and understanding and contributions which the non-governmental organizations are able and ready to make in order to achieve primary health care objectives.

Non-governmental organizations endorse the present WHO/UNICEF concept of primary health care. They accept as a fundamental starting point that health care for the preservation and promotion of health is one of the most basic human rights, as declared in the Universal Declaration of Human Rights: "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control." (Article 25)

THE HISTORICAL ROLE OF NGOs

Non-governmental organizations have a long history of active involvement in the promotion of human well-being. They possess certain strengths and characteristics which enable them to function as effective and dynamic agents in this process. They have exhibited a special capacity to work within the community in response to expressed needs. They provide important links between the community and government. They have a flexibility and freedom to respond in innovative and creative ways to a wide range of requests and situations.

Their programmes, ranging from research to community-based projects, cover the wide spectrum of human concerns and often pioneer in the fields of health and development. NGOs include the strictly professional, specialized and technical organizations, broadly-based associations of persons or groups organized for a particular purpose (e.g., information and service activities, educational institutions and associations, social welfare organizations, religious groups, women's organizations, youth groups, trade unions, family planning associations, etc.), and agencies engaged in various types of self-help economic and social development programmes. Many are linked in international federations or associations.

In most countries, there are national and/or local citizens' movements, self-help groups, cooperatives, and other associations, some organized on a tribal or ethnic basis, others to meet special needs.

In the field of health, NGOs have long helped to set standards for practice, training, and continuing education and to define the role of health workers in national programmes. Others have concentrated on a particular disease or activity (e.g., cardiovascular diseases, leprosy, tuberculosis, programmes for the disabled).

The diverse programmes and competencies of numerous organizations, not directly involved in health care, also contribute in one way or another to total human development. They include projects to improve nutrition, food production and housing, provide safe water, promote literacy, provide educational and other instructional materials, further community development, provide training in a broad range of skills, protect the environment, etc. In short, they are helping to create conditions conducive to the protection, promotion and maintenance of health and the prevention of illness. Recent years have seen a growing capacity of non-governmental organizations to develop patterns of cooperation among themselves, locally, nation-

ally, and internationally, for consultation and exchange of information, or for joint action.

PRIMARY HEALTH CARE AND DEVELOPMENT

1. Integrated Human Development

Non-governmental organizations support the view that the promotion of primary health care must be closely tied to a concern for total human development. The totality of human development, and in fact, a wholistic view of health encompasses the physical, mental, social, and spiritual well-being of the individual. Ill-health comes to rich and poor alike. However, much ill-health is a result of poverty and in itself is a serious barrier to breaking out of the bondage of poverty. Thus substantial improvements in the well-being of people cannot be expected merely as a result of better health care, but require a whole range of social, economic, political and cultural activities, i.e., primary health care must be an integral part of the overall development of society.

Human development cannot be fragmented. Social and economic factors are closely interrelated and interdependent. It is not enough, for example, to disseminate health and nutrition education if land tenure and utilization preclude the production of adequate food for local consumption. It is futile to promote a health insurance scheme if employment opportunities are so limited that participation is beyond the reach of many. Provision of a source of clean water to a community will have impact on water-borne diseases only insofar as the community is educated in its use and management.

2. Community Participation

The integrated approach to human development embodies a concern for "people" rather than merely "economic growth". It takes into account the needs and aspirations of the population and aims at providing the community with the means to promote its own well-being and to participate in its own health care. All factors that improve the quality of life must be integrated and made available. Meeting community needs is the basis for the design and implementation of any primary health activity. It calls for the involvement of community members at all stages of planning and implementation of such activities and, in satisfying those needs, promotes a confidence within the community for further involvement in development activities. Initiation of health care services often provides the opening wedge for a broader approach to community development. Efforts to secure the fullest possible participation of the community in all aspects of this process are dictated not merely by considerations of economy and efficiency but by the conviction that this is an enhancement of the individual, a necessary part of achieving a basic human right which is presently unattainable in conditions of poverty. Where the patterns of poverty, dependence, and marginalization are engrained, a motivational process is needed to create awareness in those who believe there can be no change, that possibilities in fact do exist for change.

There are several approaches to health care and none is universally applicable. The appropriate form of primary health care will vary with the differing needs of the community. There should be a rational balance among the curative, preventive, promotive, and rehabilitative components. Education of the community is essential for maximum use of the "primary" approach and for increasing the responsibility of individual families for their own health care, such as well-informed self-medication, and modification of life-styles.

Ample opportunities for a self-sustaining style of health care can be realized by relating the health care system to other community development programmes, such as fishing and farming cooperatives, credit unions and insurance schemes. Over-financing of primary health care is as serious a problem as under-financing. It tends to create unsustainable structures and institutions, and to reinforce patterns of dependency. Levels of external assistance must be appropriately limited in order to promote the self-reliant use of local resources.

WHAT NGOs CAN DO

1. At all stages in the development of primary health care programmes, NGOs can be effective. Recognition by government of the contributions NGOs can make in support of primary health care will ensure maximum benefits of these contributions to the national health programme.

2. NGOs can work for *greater understanding* and positive attitudes toward primary health care by:
   (a) promoting dialogue both within and among NGOs;
   (b) sustaining dialogue with governmental authorities;
   (c) providing information and creating new ways of explaining primary health care to the general public; and
   (d) strengthening means of communication to accomplish this.

3. NGOs can assist *national policy formation* in the areas of health care and integrated human development. They can present health care needs based on their contacts with communities, and they can also interpret primary health care plans to relevant donor agencies.

4. NGOs can establish means for greater *collaboration and coordination* of primary health care activities. This can be done among NGOs, and between them and governments, locally, nationally and internationally.

5. NGOs can contribute to primary health care in many ways through *programme implementation.* They can:

   (a) provide assistance to develop and/or strengthen local NGO capabilities and activities with particular attention to local community development groups.

   (b) conduct reviews and assessment of existing health and development programmes and assist communities in the exercise of their own role in such reviews. A greater emphasis on evaluative techniques will render all new programmes more accountable to real community needs.

   (c) develop innovative programmes placing primary health care in the context of comprehensive human development.

   (d) ensure that their existing programmes and new initiatives promote full participation by individuals and communities in the planning, implementation, and control of these programmes.

   (e) expand their training efforts to respond to the needs of primary health care programmes, e.g. training of health workers, supervisors, administrators, planners and various agricultural and development workers. Included would be training schemes which build on the skills of traditional healers and midwives.

   (f) extend their efforts to develop locally sustainable and appropriate health technologies and use of resources, with particular attention to energy, water, agriculture, sanitation and medical care.

   (g) contribute to the creation of new and effective methods of health education which enable both individuals and communities to assume greater responsibility for their own health.

   (h) recognize the essential role of women in health promotion and in the full range of community development concerns.

   (i) further extend their capacity to work with poor, disadvantaged, and remote populations, enabling them to break the cycle of deprivation, and in this way contribute to the search for greater social justice.

DECLARATION OF ALMA–ATA

The following statement was issued at the close of the International Conference on Primary Health Care at Alma-Ata, USSR, 6-12 September 1978, co-sponsored by WHO and UNICEF, and appeared in CONTACT 47, October 1978.

DECLARATION OF ALMA-ATA

The International Conference on Primary Health Care, meeting in Alma-Ata this twelfth day of September in the year Nineteen hundred and seventy-eight, expressing the need for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all the people of the world, hereby makes the following Declaration:

I

The Conference strongly reaffirms that health, which is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector.

II

The existing gross inequality in the health status of the people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable and is, therefore, of common concern to all countries.

III

Economic and social development, based on a New International Economic Order, is of basic importance to the fullest attainment of health for all and to the reduction of the gap between the health status of the developing and developed countries. The promotion and protection of the health of the people is essential to sustained economic and social development and contributes to a better quality of life and to world peace.

IV

The people have the right and duty to participate individually and collectively in the planning and implementation of their health care.

V

Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures. A main social target of governments, international organizations and the whole world community in the coming decades should be the attainment by all peoples of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life. Primary health care is the key to attaining this target as part of development in the spirit of social justice.

VI

Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system, bringing health care as close as possible to where people live and work, and

constitutes the first element of a continuing health care process.

VII

Primary health care:

1. reflects and evolves from the economic conditions and sociocultural characteristics of the country and its communities and is based on the application of the relevant results of social, biomedical and health services research and public health experience;
2. addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly;
3. includes at least: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of proper nutrition, an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs;
4. involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works and communications; and demands the coordinated efforts of all those sectors;
5. requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate;
6. should be sustained by integrated, functional and mutually supportive referral systems, leading to the progressive improvement of comprehensive health care for all, and giving priority to those most in need;
7. relies, at local and referral levels, on health workers, including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community.

VIII

All governments should formulate national policies, strategies and plans of action to launch and sustain primary health care as part of a comprehensive national health system and in coordination with other sectors. To this end, it will be necessary to exercise political will, to mobilize the country's resources and to use available external resources rationally.

IX

All countries should cooperate in a spirit of partnership and service to ensure primary health care for all people, since the attainment of health by people in any one country directly concerns and benefits every other country. In this context, the joint WHO/UNICEF report on primary health care constitutes a solid basis for the further development and operation of primary health care throughout the world.

X

An acceptable level of health can be attained for all the people of the world by the year 2000 through a fuller and better use of the world's resources, a considerable part of which are now spent on armaments and military conflicts. A genuine policy of peace, disarmament and détente could release additional resources that could well be devoted to peaceful aims and, in particular, to the acceleration of social and economic development of which primary health care is an essential part.

The International Conference on Primary Health Care calls for urgent and effective international and national action to develop and implement primary health care throughout the world and particularly in developing countries in a spirit of technical cooperation and in keeping with a New International Economic Order. It urges governments, WHO and UNICEF, and other international organizations, as well as multilateral and bilateral agencies, non-governmental organizations, funding agencies, all health workers and the whole world community to support national and international commitment to primary health care and to channel increased technical and financial support to it, particularly in developing countries. The Conference calls on all the aforementioned to collaborate in introducing, developing and maintaining primary health care in accordance with the spirit and content of this Declaration.