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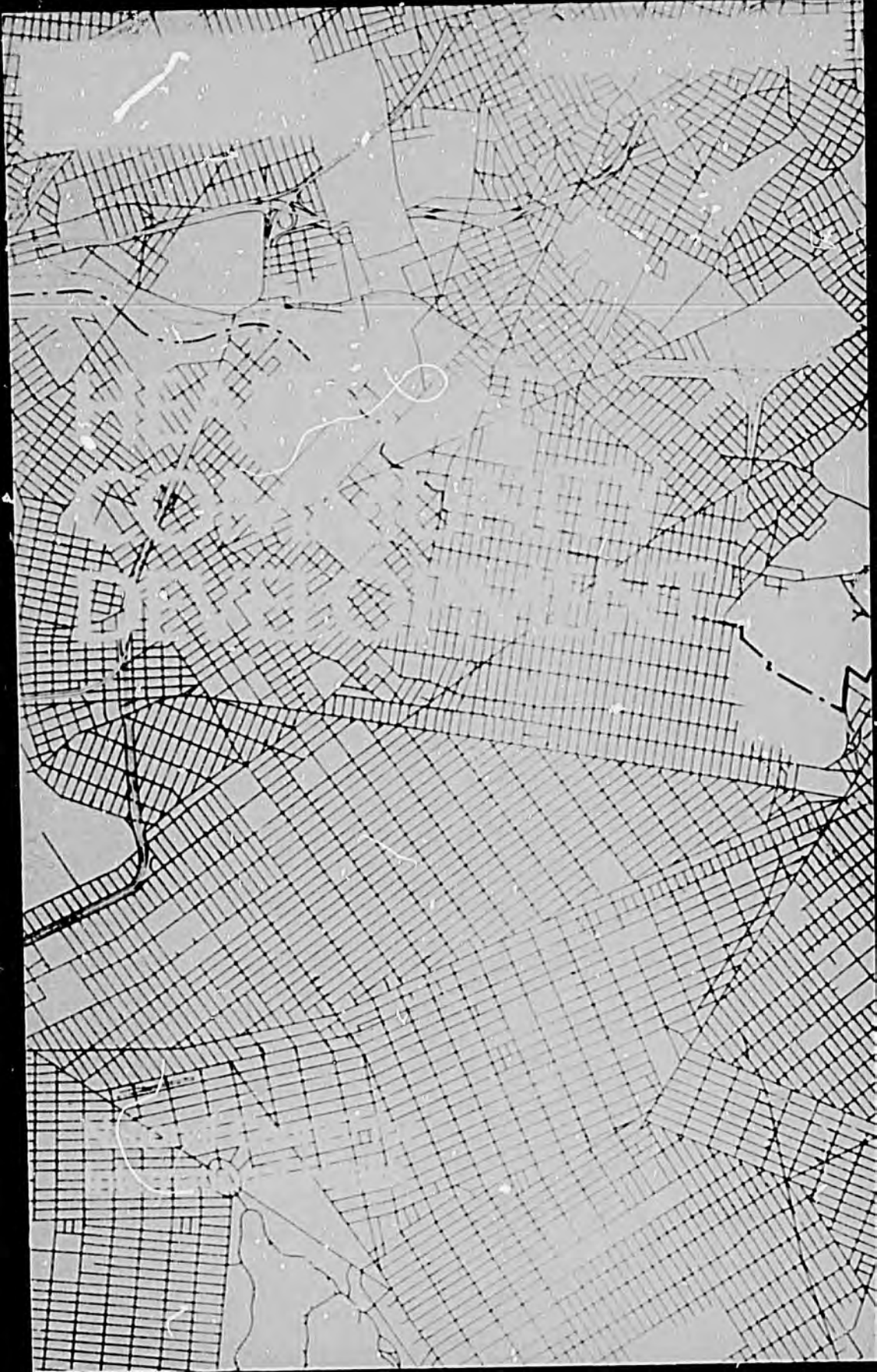

INTERNATIONAL HEALTH CONFERENCE

HEALTH IN COMMUNITY DEVELOPMENT

Papers of the Conference on
The Dynamics of Change in
Health Care and Disease Prevention
October 20-22, 1975

NATIONAL COUNCIL FOR INTERNATIONAL HEALTH

Joseph G. Perpich, M.D., J.D.
Editor

NATIONAL ACADEMY OF SCIENCES
Washington, D.C. 1975

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PREFACE

At its third International Health Conference, the National Council for International Health examined recent directions of change in health care services and disease prevention. These proceedings include the papers and commentary presented at that conference, held October 20-22, in Arlington, Virginia.

The Program Committee for the conference chose to highlight issues raised in recent reports of the World Health Organization and the World Bank. At the 1974 World Health Assembly meeting, the delegates requested the World Health Organization to concentrate its governmental assistance efforts on redirecting health service programs toward major health goals. The WHO report,[1] developed in response to this mandate, endorsed a primary health care approach to reach under-served populations. Primary health care is defined in the report as a service that integrates at the community level all the elements necessary to make a positive effect on the health status of the people in the community. The International Bank for Reconstruction and Development (the World Bank) also issued a paper[2] on health issues in 1975, related to health care delivery and rural development. The study, the first specifically focused on health issues by the World Bank, emphasizes prevention and primary care systems to meet the health needs of populations in less developed countries.

The National Council, in planning its conference, wanted to call particular attention to the health needs

1. World Health Organization: Promotion of National Health Services, Twenty-Eighth World Health Assembly, April 1975.
2. World Bank: Sector Policy Paper: Health, March 1975.

of the approximately 750 million poor in the less developed countries. These populations often have little or no access to health care and have high morbidity and mortality rates. Under the direction of its Director-General, Dr. Halfdan T. Mahler, the World Health Organization, responding to the health needs of these populations, has been changing its emphasis from the prevention and treatment of specific diseases to a broader concept of health that includes improving the quality of life.[3] This shift is fostered by the growing recognition of health as a basic human right. As outlined by Alfred Freedman in his paper, social change results when a social problem is redefined from being a misfortune to being an injustice. The papers in these proceedings reflect our new perception of disease as an injustice rather than a misfortune. Health care is a right that not only includes medical care, but also includes activities to promote health through socioeconomic development. As the reports of WHO and the World Bank document, poverty and poor health are closely related. Poor sanitation, inadequate housing, and malnutrition increase susceptibility to disease. Poor health lessens the productivity of the individual and induces social and economic instability.

At the conference, John Bryant raised a number of questions on poverty, community development, and health that the National Council wished to be addressed. For example, how do we surmount the obstacles of existing social, cultural, and economic structures to meet the health needs of the poor? How do we evaluate the goals of health systems? How do we allocate resources to meet the needs of the rural poor? Are village health workers a key element in this program? How can health care services be integrated with community development programs and other programs related to nutrition, sanitation, and family planning? Can the health establishment itself be instrumental as an agent for change? Can the training and distribution of health personnel be modified to meet the needs of populations with little or no access to health care programs? Can health care programs succeed in a variety of political, social, and cultural settings? Which programs, if any, are successful in attaining better health status and health care for populations in need? What are the reasons for program successes or

3. Proceedings of the 1974 International Health Conference, National Council for International Health, Washington, D.C.

failures? Should community participation be a goal subject to evaluation?

These questions, which transcend national boundaries, were confronted and debated at the conference. As Stephen Joseph described in his paper, new international perspectives are evolving on the distribution, control, and utilization of the world's resources. Several United Nations conferences devoted to the environment, population control, and food, are examples of these evolving trends. The call in the past year for a new economic order by the United Nations General Assembly suggests that further important shifts will occur to create a new interdependence among nations. It is these new perspectives for change with respect to health that the National Council wished to analyze at the conference.

Kenneth Newell of the World Health Organization opened the conference by emphasizing primary health care development as an agent for change. He outlined the strategy of the World Health Organization to improve the quality of life. This strategy emphasizes the role of primary health care services. The constraints on the development of this health strategy include those imposed by the political system, by the health care professions, and by the competition for resources from without and within the health sector. Dr. Newell concluded by urging health personnel to lead the way for social and economic change. Health providers are in the best position to induce change, because they are frequently the only bridge between the poor and the rest of society.

Following Dr. Newell, keynote panels discussed the constraints encountered in implementing primary health care programs. Several themes emerged. A prominent one was that the dominance of health providers in the delivery of health care services has inhibited the development of innovative and creative programs. Several recommendations were made: health planning can no longer be considered the exclusive purview of health personnel, but must involve the entire community; health programs must be part of a comprehensive effort for community development with full participation at the local level; the western model for medical education should not be seen as suitable for medical care systems in the less developed countries because it frequently is not relevant to the health needs of those countries and only serves to train physicians ill equipped to meet the health needs of their own populations.

Several speakers emphasized the importance of redirecting the education of health personnel. Basic changes were recommended in health care knowledge, skill and attitudes

to meet the challenge of primary health care programs. As Kenneth Newell stated, the key question must be how to proceed in promoting and implementing primary health care services without disrupting and antagonizing existing health personnel and programs. The traditional role of health personnel has been to provide health care services. How can that role be redirected to emphasize primary health care and prevention? In his paper, Donald Ferguson discussed efforts by the Canadian government to develop a program of health promotion activities under the direction of the Health and Welfare Minister, Marc Lalonde.[4]

To promote community development and improve the health and socioeconomic well-being of the poor is a topic that commanded considerable attention by several panelists. Reports on programs on this subject by the World Bank and the Inter-American Development Bank were presented. The national health program of Thailand is one example described that illustrates integration of health services with community development at the local level.

In the final keynote address of the first day, Dmitri Venediktov, Deputy Minister of Health of the U.S.S.R., reviewed the history of international cooperation in health. He highlighted the importance of research in health problems that directly affect populations in the less developed countries. As to promoting primary care, he urged that primary health care programs be fully integrated with, and not act in derogation or substitution of, existing health care systems.

On the second day of the conference, panelists examined models for development of primary health care systems. Reports from the panels were presented at the closing session of the meeting. A number of issues raised by the panels complemented those presented on the first day of the meeting. The panelists struggled, in the words of George Silver, to get at the "thorny problems that lie behind the ceremonial screen of program design."

Kenneth Newell reviewed criteria for the selection of countries to which international assistance for promoting primary health care services would be provided. The criteria are based on the degree of commitment by a country to create and implement programs in primary care services. Depending upon the degree of commitment, different levels of assistance are required. Lee Howard cited the work of the Agency for International Development to fund health

4. Lalonde, M.: A New Perspective on the Health of Canadians (1974).

programs that are integrated with community development programs. Problems AID has encountered in promoting such programs are those that were cited by Dr. Newell and other panelists on the first day. They include the inappropriate application of Western curative medicine, and a skewed allocation of resources in health, especially in those countries retaining a colonial health care system dependent on highly specialized health personnel. Examples given of AID-funded programs in urban Colombia and rural Thailand provide promising models for development.

Private voluntary agencies also play an important role in international health development. An example is the program to integrate family planning services, sponsored in four countries by The Population Council. As Leon Marion explained, voluntary agencies have more flexibility than governments to create innovative programs. If a voluntary agency program fails, it usually will not cause the havoc that a large-scale governmental program failure can. And, voluntary agency programs often can act more quickly to respond to needs. Another important influence of the private sector in international health, which was examined by a panel, is the role of multinational corporations. A wide spectrum of public health and medical service programs are offered by these corporations through projects in underdeveloped areas.

In regard to health programs for the poor, a number of panelists called attention to differences among poor populations in rural and urban areas. The effects on the American Indian of migration from the reservation to the city was reported by Michael Fuchs, who described different socioeconomic and cultural attributes of the rural and urban settings. As Nicholas Cunningham observed, the rural setting is often more homogeneous, retaining traditional cultural modes. In the urban communities, on the other hand, the culture is fragmented by the influences of a population that is more heterogeneous and transient. These differences must be taken into account in developing health programs to meet the needs of these populations.

Cunningham has studied maternal and child health in rural Nigeria and urban New York, and has developed a comparative table of qualifications for the urban and rural health worker. Concerning the selection and training of community health workers in the rural community, for example, one might want to choose an older person with tighter cultural ties to that community. In the urban setting, however, one might want to look for someone with more substantive technological qualifications. In reference to the urban population, John Bryant cited a recent book by Charles Elliot,

The Patterns of Poverty in the Third World, which distinguishes two groups in the urban population. The first includes those who belong to the formal economic system; they have stable jobs and living arrangements. The other group comprises those of the informal economic system; they live on a marginal basis and work at such jobs as street hawking or car washing. The latter group tends to be excluded from the formal system and is frequently exploited by it, a circumstance that must be recognized in the development of health program goals and priorities for urban populations.

New roles for women and for dentists in health were examined by panelists, who reviewed such programs as the Frontier Nursing Service, which provides health care in rural Kentucky through the use of nonprofessionals. In a different setting, the role of the indigenous healer was described in a perceptive paper by Kathleen Toomey, a medical student at Harvard who studied with a Peruvian curandero, the medicine man. She observed that the models of Western medicine and the indigenous healer may complement one another, because the use of native psychotherapy and herbal medicines, as well as Western practices, can be efficacious in the treatment of native populations.

Stephen Joseph and James McGilvray raised a number of questions during the final session of the conference. In reviewing the conference, Dr. Joseph commented that much of the discussion was concerned with the way that speakers and panelists would like the world to be, and too little was said about the way the world is and the way it becomes. He voiced dissatisfaction with model or pilot projects that do not have relevance for national programs. As another participant noted, the road to health sector development is strewn with pilot projects and models. The question is: how many models must be developed before the recognition comes that we have invested incorrectly?

James McGilvray reported that the World Health Conference that endorsed the report on primary health care services, specifically omitted any reference to the developed countries. The developed countries had insisted they not be included in emphasizing the need to promote primary health care. "Apparently we are still unwilling to admit that many millions are still deprived of adequate health care services in our own countries," Mr. McGilvray observed. He concluded that most health care systems are failures, devised by professionals largely for their own satisfaction and not for the consumer's needs or desires. Government health planners, he noted, are not receptive to the emphasis on primary health care priorities. In his view,

health care programs will continue to fail and their impact will be minimal unless the programs are designed with people rather than for them. Echoing the comments of Kenneth Newell, Mr. McGilvray made a number of suggestions: A national will must emerge in order to develop and implement primary health care as a first priority; where such national will is lacking, the emphasis must be on agriculture, housing and health education; funding of sophisticated and highly technological facilities must take second place to the development of a network of primary health care facilities.

John Cutler, Chairman of the Program Committee, in closing observed that the dynamics of change in the quality of health is not merely a matter of technology; nor is it merely a matter of knowledge of what to do. Change depends on the basic elements of human and institutional growth, development, and behavior. The panel, chaired by James McGilvray, recommended as a policy statement that this recognition implies that health care is as dependent on the acceptance by the consumer as on the services of the providers. Such acceptance is a function of the consumer's culture, value system, and felt needs. Therefore, health care delivery systems should include an information system that is attuned to the culture of the consumer and designed to encourage acceptance of recommended services and behaviors. To accomplish these ends, Dr. Cutler and others concluded, we must accept our mutual interdependence not only to promote health but socioeconomic justice as well. Health promotion and socioeconomic justice must move together if the aspirations are to be met of those most in need in the less developed countries. The National Council, by arranging the international conference, and publishing these proceedings, hopes to continue this international impetus for change, especially, as called for by the World Health Organization and World Bank, in the areas of health care and disease prevention.

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DAY I

HEALTH CARE PROBLEMS: *THE STRATEGY FOR CHANGE*

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WELCOME

Henry L. Feffer
Chairman
National Council for
International Health

Good morning. Welcome to the third annual conference on international health sponsored by the National Council for International Health.

Before proceeding with the substantive issues of the day, I should like to make one important announcement. There has been great difficulty this year in freeing up that portion of WHO funding which is normally accepted by the United States. Unfortunately there has been an unusual amount of bureaucratic haggling this time around and WHO has been caught in the middle. As a result, the funds which amount to $25,000,000 and were due on the first of January, 1975, have not as yet been forthcoming. WHO has been placed in a very difficult position, and it behooves all of us to use any effective political clout we have to move the appropriation along. The unpleasant part of it is that the money will eventually be released, but the more it is delayed the more the continuity of the organization is interrupted. Personnel, once cut loose, are often difficult to bring back into the system.

With that, I shall move into a few brief introductory remarks about the National Council for International Health - what it has done, and, hopefully, where it is going. The Council was created about four years ago, in response to a task force recommendation, as a meeting ground for responsible international health activity in the United States. Although there have been many frustrations and numerous exploratory sessions were required, we now seem to have advanced beyond the talking stage, and effective operational activity is discernible. We would like to think of ourselves as a sounding board to facilitate communication and cooperation. We certainly do not wish to become a coordinating body, and hope we never will.

The first International Health Conference sponsored by the NCIH dealt with The Effect of Health on the Quality of Life; and last year we focused on The Health of the Family. This year, in response to two very timely papers by WHO and the World Bank, the conference is devoted to health promotion and primary health care systems to meet the health needs of populations in the lesser developed countries. The Council is particularly interested in the dynamics of change in health, including linkages and interplay of health services in the community. We hope to examine why some programs work and some do not work; why some programs are acceptable to the community and some are not. Conference participants have been selected because of their special knowledge in this area.

We are indeed fortunate in having Kenneth Newell with us today as our first speaker. As Director of the Division of Strengthening of Health Services of the World Health Organization, he is especially suited to keynote this conference devoted to primary health care. The emphasis of WHO on primary health care has been obvious ever since Dr. Mahler became Director General, and it has been Dr. Newell who has been in charge of this effort for him. It is my great honor to introduce Dr. Kenneth Newell who will set the stage for this conference with our Keynote Address.

KEYNOTE ADDRESS

Health Care Development as an Agent of Change

Kenneth W. Newell

We are meeting here this week to discuss the dynamics of change in health care and prevention, and the starting point on this, our first day, could well be a restatement of the problem. This is difficult because such statements often take the form of horror stories from afar, which may appear unreal to us sitting here in Washington, and because the problem has never really been objectively quantified. But it is necessary because it is probable that we may not all agree as to the nature of the problem.

Even if one restricts one's concern to the developing world, which contains the majority of the world's population, one can make health assessments in so many different ways. It is customary or conventional to start by looking at the occurrence of disease. If we do this, while there may be some indication of decreasing mortality rates for some conditions, and we can view with satisfaction such victories as the control of smallpox, the position is still intolerable. Epidemic and communicable disease, whether it be malaria, venereal disease, tuberculosis or the communicable diseases of childhood, is on the increase or is static. Death, disability, limited expectation of life, and improper development are the usual rather than the unusual, and this is as evident within countries as between countries. If the majority of the countries in the world can be classified as developing countries, the majority of the populations which live outside the urban elite within these countries can be said to be the victims of the poverty-malnutrition-infection syndrome and to live and die with the disease pictures which are their local expression. This has been documented by numerous investigations.

If one looks at the same picture from the standpoint of health services rather than disease, the picture is

little better. A recent WHO study[1] by the executive board states, and I quote from it at some length:

"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 in 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 a major crisis is on the point of developing and that it must be faced at once, as it could result in a reaction that could be both destructive and costly. There appears to be widespread dissatisfaction of populations about their health services for varying reasons. Such dissatisfaction occurs in the developed as well as in the third world. The causes 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 the 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 on the part of 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 most wanted by the consumer.

"Examples of such expressions of dissatisfaction can be found within the borders of most countries but it is suspected that the countries that apparently show least dissatisfaction are probably the ones where the causal factors are most prevalent and where their effects have the greatest disadvantages in terms of health. It is possible to list likely reasons for some of these occurrences. There are insufficient health service funds in many countries, although the proportion of the national income spent on health services may often be similar in the wealthy and in the less fortunate. Many countries have an inadequate coverage of the population by state-supported health services. But even where "coverage" is high it may be insufficient, as the dominating goal must be the use of the proper services. People should be able to afford to use the services, and the services should provide a level of health care which people consider proper to use. A pattern is emerging of less or least utilization of health services in areas that have the

least sufficient services. There is a shortage of trained staff at all levels; but countries that have insufficient staff show the greatest maldistributions within the country, and appear to have the highest emigration rate. It would appear to be economic and sensible to invest more money in preventive services when this could show a higher return to more people, in terms of health. However, the immediate needs in terms of health care are more important to the parent of a sick child than a long-term possible risk, and a service geared to the long-term needs, and not to emergency care, may be looked upon as an irrelevance and even with anger."

In practical terms it can be said that in many countries there is no health care, as we at present know it, for the majority of the population, and that the national health resources, built and administered for all, are being consumed by the few favoured by geography, social class, wealth or position. The underserved are largely rural but also include the urban poor, and it is incongruous but common to find some such disadvantaged groups living beside the wall of the capital's medical school or teaching hospital.

So many of the precursors of disease and the lack of action in making our existing health technology available to all appear to be related to poverty, that it may be properly questioned whether it is possible to be simultaneously poor, in the way described by the World Bank, and healthy.

The World Bank (IBRD) states that "approximately 85% of the 750 million poor in the developing world are considered to be in absolute poverty - based on the arbitrary criteria of an annual per capita income equivalent to $50 or less. The reamining 15% are judged to be in relative poverty having incomes above the equivalent of $50, but below one-third of the national average per capita income.

"Three quarters of those in absolute poverty are in the developing countries of Asia, reflecting both the low levels of national per capita income and the large size of the rural sector there. As for those in relative poverty, most of them are found in developing countries that are less poor, a large fraction being in Latin America.

"Of the population in developing countries considered to be in either absolute or relative poverty, more than 80% are estimated to live in rural areas."

Taking these statements at face value, it is clear that we are talking about the same groups of people, or target populations, who are poor, have high rates of disease and early death, and who are underserved in health service terms. For the most part these people are the rural populations of the developing world. It could be said that all three of these qualities are occurring in the same people due to chance factors and that they are unrelated. What evidence we have suggests that this is unlikely to be true. If it is agreed that they are connected, research and arguments upon whether disease leads to poverty, or poverty to disease, have been unconvincing whether they have been expressed in sociological, epidemiological or economic terms. Not only may they be so interconnected that such chicken and egg thinking may not be applicable, but some may conclude that they are different expressions of the same process, and the more meaningful objective may not be increased productivity or a decrease in disease but something which includes them both. The disadvantage of such wider goals is that we have not got the proper words to describe what we mean unless we use generalities such as health or happiness or quality of life.

In a recent report[3] Dr. Mahler, as Director-General of WHO, has written:

"Traditionally, medicine has been viewed as the art of healing the sick. To this role has been added in more modern times the prevention of specific diseases. Very recently, however, a broader concept has been emerging in many countires--that of improving the quality of life. This is a concept that is, in fact, already embodied in the WHO Constitution, which defines health as 'a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.'

"In its early years WHO was too preoccupied with relieving the burdens of disease and infirmity to pay more than lip-service to the broader aims implied in this definition. Today, it is striving to translate these aims into action and is looking for ways of achieving a more stable equilibrium between man and his environment, in the hope that this will not only reduce man's vulnerability to disease but also permit him to lead a more productive and satisfying life."

If at this Conference it can be agreed that when we are referring to Health Care and Prevention we mean this

complex of qualities, I consider that we have made an enormous stride forward and could have an exciting and productive two days in front of us. However, we should make such a choice knowingly, because such objectives are not the sole responsibility of the health professions and there are many important implications. For example, we must be prepared to go very much further than making bland statements about multidisciplinary activities or intersectoral connections between medicine, economics, politics, agriculture and the social services. We may even have to condition or enlarge our general philosophic statements upon the "rights" of each individual to health and health care. Decisions and priorities may need to be made which push aside some of the technical arguments of the health services and, instead of disease control being a dominant primary goal, some other short-term objectives may come to the top, and we may have to use our resources, our thinking, and our place in society to further these quite as forcefully and energetically as if we were trying to control or eradicate a disease. We could be taking such actions in order to improve the health of the people as a long-term goal. The arguments why we (in conjunction with others) should do such things are because:

a) this is likely to be the quickest, cheapest, most effective and most acceptable way to improve the health of the world's majority;

b) because of our training and experience and our role in society we may be able to help such changes in a unique way and move towards a point when our more traditional skills can also be effectively applied.

It may be said by some that they do not accept this view of the problem; that the health professions do not have this responsibility in their mandate; that we were not trained and are not competent to undertake this sort of activity; and that we are in some way belittling our competence and our existing technology which can influence fertility, prevent much disease and help the sick if "properly" applied.

I reject all these arguments and consider that the subject of this Conference is to discuss the implications of Dr. Mahler's wider view of the world and to seriously debate whether we can help such a movement and in what manner. This could be traumatic, for while some of our future actions could be in addition to those we

are already doing, we may find that some of our existing policies may be in direct conflict and may need to be stopped or redirected.

With this as a starting point, I want to deal with some aspects in greater detail. Recently WHO and UNICEF conducted a joint study on Alternative Approaches to Meeting Basic Health Needs of Populations in Developing Countries.[5] This consisted of an appreciation of a series of selected examples at country or project level where changes were evident during the past few years and which could be called "successes." This study was complemented by a book[4] giving participants views from the "inside," and they were summarized in the following way:

The goals of the authors "are much wider than the conventional ones and range from that of health as a political and social right to that of health as an expression, or a spin-off, of a quietly functioning informed community. From this standpoint the authors place themselves apart from others who might judge success only by indices such as the infant mortality rate, disease prevalence, or the number of immunizations given. They do not question the fact that infants need food, pregnant mothers need to be delivered, immunizations are useful and prevent illness, or that sick people need treatment. On the contrary, they emphasize that these are some of the expressions of community action and that they will inevitably follow if you proceed in a reasonable way and take the wider issues into account. The wider issues presented include: productivity and sufficient resources to enable people to eat and be educated; a sense of community responsibility and involvement; a functioning community organization; self-sufficiency in all important matters and a reliance on outside resources only for emergencies; and understanding of the uniqueness of each community coupled with the individual and group pride and dignity associated with it; and, lastly, the feeling that people have of a true unity between their land, their work and their households. With these as prerequisites it is not necessary to bother to document the absurdities of the different bureaucratic responses to agricultural, educational, health service or development needs.

To some people, in the health field, such ideas may be strange, objectionable, or absurd. They could be said to be philosophical rather than practical. They could be

thought of as an expression of arrogance because they are so all-embracing, while our backgrounds fit us only for 'Health.' They may be more difficult to translate into action than the control of malaria or the provision of a water supply. A conscious effort is required to accept these ideas as essential qualities or to admit that without them there must be failure. It is easy to say that food is what is needed by a malnourished child and that community development is a mechanism that can be used to supply it. It is hard to say that community development is a goal and that communities in the process of developing find a way of seeing that children get food. These concepts are not the same. The way in which change is assisted and results are obtained may depend to a crucial extent upon which approach is adopted."

It is clear that what is being said here is that health development is a part of community development and that the health of individuals and communities will improve if a continuing, self-sustaining process of community development can be started. Such an improvement will take place partly because a change in many of the nutritional, environmental and other precursors of disease comes high in the ranking order of most communities in their own right and not necessarily because of their linkages with health. Health services in the conventional, institutionalized sense, whether they be preventive or curative, come very much lower or later in many such societies.

At this point two additional points deserve mention and subsequent discussion. Both of them are connected by the ideas we may have as to the meaning of the word "poor."

I think that all of us would agree that a poor family or a village is one where the people do not have adequate food, water, clothing, shelter, or a clear possibility of decreasing the environmental hazards and improving their life by education or health services or other means. While such things require resources, the presence of resources does not necessarily mean that these necessities are available. We are talking about what people consume and not necessarily about what they produce. These two things are clearly connected, but their relationship is not so intimate that an increase in productivity necessarily means that a family is less poor. Some of our target populations have clearly such a low productive capacity at present that they must remain poor (in consumption terms) until this is raised.

However, an increase, in whatever manner it is achieved, must result in a change in consumption as well, or we have really achieved nothing. We must continually remind ourselves of this, or the search after "increased productivity" may be as illusory as our search after "health."

The second point is that all the "poor" are not the same. I will never forget the statement made to me in China that the Chinese revolution was a victory because it had changed China from a "feudal" to a "poor" country. The health effects of poverty are not evenly divided among the poor. There is an absolute minimum amount of resources in food and other material without which it is impossible to be healthy. If you are above this minimum your achievement in health may be partly dependent upon your ingenuity and planning, your way of life, and the hazards you have to face, but below it, health is impossible. I call this the "absolute" health hypothesis, and if it is true then success to the deprived must take cognizance of this and present solutions which will result in all people being above this minimum as one of its qualities.

It was with such reasoning that the Director-General of WHO presented a report to the Twenty-Eighth World Health Assembly in 1975 entitled, "Promotion of National Health Services."[6] He made a proposal for agreement upon the need to give special thought and emphasis to the underserved millions in the world, with particular reference to rural populations. He accepted that the problem was a difficult one, not only because of its magnitude, but also because its nature required a changed way of thinking. However, the evidence already available from national and subnational programmes, from many different geographical areas and from countries with different political systems, made it seem possible that it could be solved.

This report advocated a concentration upon what WHO calls "Primary Health Care." Here we must be careful to avoid a confusion in terms. In many countries "Primary Medical Care" is taken to be the first contact between a sick person and the health care system, represented by a nurse, general practitioner, in some cases even a highly specialized consultant, or someone at any other level of the health services. In every health system there must be some such meeting point, and who this person is, whom he or she meets for what reasons, is of enormous significance.

But what WHO means by Primary Health Care is much

wider than this. "Primary Health Care is taken to mean a health approach which integrates at the community level all the elements necessary to make an impact upon the health status of the people. Such an approach should be an integral part of the national health care system. It is an expression or response to the fundamental human needs of how a person can know of, and be assisted in, the actions required to live a healthy life, and where a person can go if he/she needs relief from pain or suffering. A response to such needs must be a series of simple and effective measures in terms of cost, technique and organization, which are easily accessible to the people in need and which assist in improving the living conditions of individuals, families and communities. These include preventive, promotive, curative and rehabilitative health measures and community development activities."[6]

The justification for this approach was that many health services were malfunctioning, with the following consequences (and I again quote from this report)[6]:

"(i) The inability of the health care system to make available the services required to meet the demands of those most in need, who are usually too poor or too geographically or socially remote to benefit from such facilities.

(ii) Wide differences in resources distribution and service and a multiplicity of institutions which are unrelated and not functioning as a system.

(iii) That emphasis has been given to medical rather than overall health care. The curative aspect of care has been stressed with insufficient priority to promotive, preventive and rehabilitative care. This has resulted in a fragmentation of the care provided to the individual.

(iv) That the training of health personnel has been primarily directed towards medical and institutional care, and has been largely irrelevant to the tasks and functions required outside institutional settings.

(v) The education and training of health professionals has accentuated the social distance between health professionals and the population, resulting in an inability on the part of the providers of health services to be able to identify with the consumers.

(vi) A lack of recognition as well as a rejection of useful traditional healing practices.

(vii) An inadequate assessment of other community resources imposing unnecessary limitations on the scope of action of health services, and often preventing them

from approaching major community needs in an effective manner.

(viii) That the people have rarely been given the opportunity to play an active role in deciding the types of activities they want and have not participated in the actual services they receive. Community interest and resources have too often been inadequately expressed and activated because there has been a failure to recognize that people will be most interested in and responsive to activities related to their own priority concerns."

Here we have two separate but related series of ideas. On one side is the recognition that many health services are not fulfilling their functions and acting as a coherent health system providing service to the total population, and probably cannot do so using the present methods of delivery and the resources now available.

And the other is the suspicion that the general health status of the majority of people is unlikely to reach an acceptable level without national actions aimed at the precursors of the poverty-malnutrition-infection syndrome, which are tied to an improvement in socio-economic conditions.

Neither of these ideas are new to any of us. Despite this, few of us have acted upon them in an effective way.

In the same reports[4,5,6] WHO presents the argument that the problem is solvable and is approaching solution in a number of different countries. In each of them it has been possible to adapt the health services to Primary Health Care principles. The common principles include:

"(i) Primary health care should be shaped around the life patterns of the population it should serve and should meet the needs of the community.

(ii) Primary health care should be an integral part of the national health system and 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.

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

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

what are the community needs requiring solution should be based upon a continuing dialogue between the people and the services.

(v) Health care offered should place a maximum reliance on available community resources, expecially those which have hitherto remained untapped, and should remain within the stringent cost limitations that are present in each country.

(vi) Primary health care should use an integrated approach of preventive, promotive, curative and rehabilitative services for the individual, family and community. The balance between these services should vary according to community needs and may well change over time.

(vii) The majority of health interventions should be undertaken at the most peripheral practicable level of the health services by workers most suitably trained for performing these activities."

Each of us might select a different one of these factors which we would consider to be of dominating importance, but it would appear to WHO that all of them are required.

If most of us agree upon these principles we have a starting point, but we still have a long way to go before we know how countries can decide to follow this path.

It nas been said that there may be at least four major reasons which can help to explain why so little action has taken place.

(a) Political. The needs and rights of all people to receive health care is accepted by all countries who are members of WHO, and this is the vast majority of the peoples of the world. While there may well be internal political implications for a government which will enter into a new and different health partnership with its people, it is the opinion of WHO that most national leaders want to take such a path if the way is clear and the implications are known. Some countries, which accept the need to change the whole complex of poverty, inequitable distribution of resources, and social and health injustice, have taken steps to put forward wide proposals covering all or many sectors. Others ask the question whether it is possible to tackle the health sector alone or before dealing with other sectors. This is an unanswered question but one of dominating importance. I feel that we must assume that the answer is yes, until we have evidence to the contrary. Until we can demonstrate it with examples, the doubt is an understandable constraint.

(b) Opposition of the Health Professions. Such opposition can take many forms. At one extreme is the worry of some health professionals that a Primary Health Care-dominated health system could decrease their incomes, status and influence. It is certainly likely that national health service changes will also change their manner of work, but the countries with the dominating need will still need their health professionals as they do now. However, extreme maldistributions, such as the common experience that 75-85% of doctors are in the capital city, or that there are more doctors than nurses, will clearly have to change. Such adjustments may well be traumatic but will need to be faced, and opposition can be expected, using many old battle cries, including those attacking change because quality will be decreased or because it will be said that one is proposing a second class and dangerous service. None of these charges can be substantiated, but this does not make their emotional impact any less persuasive.

(c) Change means more for some but less for others. It has been said that few countries in the developing world have sufficient national resources assignable to health to introduce a national service based upon Primary Health Care ideas. This is true if one examines the Ministry of Health budgets, which may be $1 to $5 per capita per year or less. However, it is not true if we look at the potential resources available if Primary Health Care was introduced at the village level, tapping the labour, goodwill and ingenuity of the village people themselves in a situation where both their increased productivity and consumption were part of the deal. Certainly some redistribution of national health resources would also need to be made, but I question whether a decrease in some of the high technology health expenditures in the cities would have a grossly adverse effect upon the health of the favoured few.

(d) Capital and Process Costs of a Revised Health System. One of the qualities of an effective health system for any country must be that it is self-sufficient and able to be financed using national resources. However, the costs of changing over from a clearly inefficient Western copy to a truly national system involving all is at present unknown. It is unlikely that the poorer countries have the resources for such a change, and it is necessary to consider whether sufficient help is likely to be available from international agencies or from bilateral sources to make a

meaningful impact. Here are a whole new series of unknowns, but it is the opinion of WHO that there are sufficient resources which could be made available to make a start in an appreciable number of countries, while in others the matter is of such moment that they will move along this path whether international help is available or not.

As one passes the fourth reason, many others of major moment come to mind. As many of them come under the different headings of the panel discussions of this Conference, I shall not continue to list them here. Instead I shall return to the title of this keynote address, which is "Health Care Development as an Agent of Change."

The arguments I have put forward today, after stating the problem, revolve around the possibility of designing and introducing health systems which reach all the people and equally deal with the main precursors of ill health. Even if you accept the logic of the preceding arguments, it may not mean that you also accept that the health establishment should be the agent of change. We agree that health care may be low in the ranked priorities of communities on the fringe of survival. All of us feel incompetent and untrained in dealing with the real technical, social and economic problems which are at the heart of economic and social underdevelopment. "Why us?" you may ask. "Why not wait until some of these other sectors do their work, and then let us respond in a suitable manner."

I would argue against this in the following way, even if we leave aside the conclusion that the present position is intolerable, and thus we cannot sit back and wait for something to happen.

The poverty-health relationship is two-way and not just one-way. In the same way that it is difficult to visualize a healthy family below our "absolute" in productivity and consumption, it is clearly more difficult for a people to increase their economic and social potential if they are suffering from continuous deprivation and failures in human development, or they are sick. Maybe the improvement we want to encourage will not take place unless the health component starts first, or near the beginning. This is certainly true in the onchocerciasis areas in West Africa, and all of us must have similar extreme examples of our own.

This must be a dominating argument, although, in less extreme areas, others have also been made. Health

workers have a dual relationship. They are the advisers of people who share with them their most intimate secrets and often accept their impartiality and judgement even on matters of life and death. Health workers are also advisers to the different levels of government. Therefore, by the very nature of their place in society, they can be the almost perfect intermediaries in the crucial link which will have to be forged between the two. I can think of no other group which has quite the same role. Surely we can use this as one of our weapons?

Conclusion

I am personally convinced that the problem that has been described is a real one, which has not sprung upon us in the present, but has been with us for a long time. We have shut our eyes to it because we have said that it will disappear when underdevelopment will disappear. Now we are starting to understand that it is not only a product of underdevelopment but is maybe one of the complex of factors which even add to it. There clearly are solutions, although none of them are of a form which fits in completely with our comfortable view of the industrial world. Major adaptations will be needed, and these in turn may threaten us because they may question some of the assumptions upon which our societies and health services are based. As such ideas become widely debated and discussed in conferences such as this, it is likely that we shall have fewer and fewer choices other than to document the course of events. The world is changing, and the health services are going to as well. The choice in front of us may be whether we shall lead, or whether we shall be pushed. I hope that it will be the former.

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HENRY FEFFER: Thank you, Dr. Newell. That is a fitting keynote presentation for this conference. I am sure that everybody will be stimulated to review the principal constraints that you presented, namely, political and fiscal, and further, the inertia within the health establishment.

Perhaps the potential political impact of the health establishment as a bridge between the political power and the community is one of the most severe limitations because of the existing political strength of the health community in present systems. Some of today's panels will turn to this, although I know we are not going to have any solutions. We may hone in on these problems a little more than we have in the past.

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KEYNOTE PANEL:
Health Planning
and Administration

Hector R. Acuña, Chairman
Eli Ginzberg
Philip Caper

HECTOR R. ACUÑA

The governing bodies of the Pan American Health Organization, as well as spokesmen at Special Meetings of Ministers of Health of the Americas, have urged governments of our hemisphere, since the early 1960's, to identify outstanding health problems and to define national health policies and strategies aimed at solving such problems, through a continuous process of health planning, administration and evaluation.

The growing interest of Latin American countries in a continental effort to accelerate social and economic development was crystallized in the Charter of Punta del Este in 1961. The mutual relationship which exists between health and economic development was recognized, as well as the fact that living conditions, welfare and public health programs are essential and complementary to economic undertakings. The governments also resolved to prepare national health plans for the decade of the 1960's and to create planning and evaluation units within their Ministries of Health, in coordination with overall national planning systems. In a sense, this was a continental commitment and the Organization was requested to provide the necessary means and assistance to carry on this enterprise.

In accordance with this decision, a health planning method was formulated jointly by the Organization and the Center for Development Studies of the University of Venezuela. This methodology, unlike other approaches to sectoral planning, was based on the preparation of local programs, with subsequent grouping to constitute regional and then national programs. Although the methodology aimed at promoting a comprehensive approach, it focused on health planning for local areas. Several countries followed this procedure in their planning activities.

Most established formal national health planning units. National systems soon acquired their own individual characteristics; the methodology was adapted and complementary or alternative measures were introduced.

In spite of some limitations, this methodology has in fact had great influence on health planning in the countries. There have been both internal and external factors which stimulated this process: first, the existence of overall economic and social planning systems, and the promotional activities of PAHO/WHO, have served to stimulate and support these systems; second, the availability of external financial assistance from credit agencies has assisted governments to obtain resources; and finally, the intensive training program for health planners developed by PAHO/WHO has provided trained experts for this purpose.

Health planning has undoubtedly had some fundamental effects in Latin America. The concept of health as such, and as a multisectoral element within the social context, has been widely accepted. Health workers have gradually become more conscious of the fact that solutions to problems often go beyond the scope of their own knowledge and actions, and that a health policy cannot exist independently of the social and economic conditions of the country.

Through planning efforts, it has been possible to identify problems and inconsistencies in traditional health services management. Weakness in organization and administration, poor coordination in administrative and institutional aspects, absence of supervision and control, obsolete methods, and lack of new approaches became evident.

Simultaneously, some other serious obstacles were detected. Health planners and administrators realized that there were gaps and weaknesses in the methodology and that technical tools had limited value in dealing with complex situations. In some countries health plans were drafted but never put into effect, or they were only partially implemented. Few countries actually completed the program cycle, and of those that did, some failed to carry it through all the way. Coordination and functional integration of health activities proceeded slowly. Few countries are attaining complete coverage of the organized health sector. Few gains have been made in the intersectoral correlation of plans. Often planners have wanted decisions to be made solely on the basis of technical alternatives, without taking into account political values that affect the decision-making process.

Early in the present decade, governments in this hemisphere had become increasingly aware that health planning must be more than an intermittent exercise of preparing plans and documents. It must be a continuous process, with coherence and permanence, capable of constant improvement through trial and error. Gradually, it became clear that planning must be applied through successive stages, in which the objectives can range from an attack on new problems to the extension of geographic coverage of services in order to serve more people. In planning for the health sector, it is possible to cover only a given region, the entire country, or, in some cases, adjacent areas of two countries. Whatever the case, planning for the health sector cannot be done independently from socioeconomic development.

It has been accepted that there is no single method for planning, rather a series of methods that may be applied in the light of each particular situation. We must note that in many instances services have been rendered or planned in relation to projects inspired not by the needs of the community, but by the desire to introduce imported techniques and procedures with doubtful relationship to the community's priorities.

In 1972, the Third Special Meeting of Ministers of Health of the Americas, held in Santiago, Chile, examined the achievements of the previous ten years; analyzed present and future problems, and defined the health goals which might be achieved in the present decade through hemispheric efforts. The Ten-Year Health Plan, 1971-1980, was the result of a rather elaborate scheme influenced somewhat by country health planning experience.

Information for analysis of health conditions in the countries of the region, and for preparation of comprehensive proposals for the present decade, was obtained from joint country/PAHO planning documents and from direct national sources. This material was assembled and reviewed by each country before the Meeting of Ministers in the light of national conditions and trends. As a result of this analysis, specific proposals were brought by the Ministers of Health to their Third Special Meeting. It must be stressed that the achievements reached in Santiago were mainly the consequence of work developed in each country prior to the meeting.

One of the problems that aroused great concern during the debates at that meeting was the inadequacy of coverage and the short supply of health care for all peoples. The Ministers agreed that the problems

were the legacy of an obsolete system. Even though this system had served a useful purpose, it had become noteworthy for limited accessibility and prohibitive cost. In short, it was inadequate for provider and consumer alike. The Ministers recognized that, even in developed countries, poor persons in remote and isolated areas and many indigenous populations lacked proper care. In 1972, almost 40% of the population in Latin America had no access to health services. It is quite clear that, unless there is a decided change in traditional structures and additional resources are made available, no real impact on the problem will be forthcoming.

As in the past decade, the Organization again has been requested by its governing bodies to provide assistance to the countries in order to implement the strategies and achieve the goals stated in the continental health plan. Planning, administration and evaluation are the fundamental elements usually relied upon for transforming regional and national policies into programs and actions. However, the complexity of the new task has compelled the Organization to seek new avenues and procedures. In addition to the broad approach of health planning, aimed at defining national health policies, sectoral diagnosis, institutional analysis and financing of the health sector, attention is now being given to the development of methodological instruments for regional and local programming. This approach should promote the expansion of coverage of health services to unprotected populations. New solutions, including active community participation in this endeavor, are also being seriously considered.

We want to emphasize the fact that such plans and programs must be designed and implemented not only in terms of the characteristics of health problems but also bearing in mind the cultural and socioeconomic conditions of the countries. The technology to be used for this purpose should be adjusted to local conditions and, wherever possible, locally developed. The national staff, working at various levels of the system, should be fully involved in planning, programming, and evaluating actions. Planning is no longer the property of the health planners, but a continuous responsibility of the whole health team. In other words, planning in this stage is a fundamental component and an indivisible part, as well as an instrument of the administration and development of health services.

At present, 20 out of 30 countries of the Americas have analyzed, and in many cases adjusted, their national

health policies in the light of the Ten-Year Health Plan, giving priority to extension of health service coverage. Several countries have decided to use external financial assistance to expand their health services to unprotected areas. At least 10 countries have requested or obtained loans from credit agencies in the total amount of 150 million dollars. In addition, six countries are in the preliminary stages of negotiation for other loans totaling more than 100 million dollars. It is expected that the governments will invest, from their own resources, at least two or three times these amounts as counterpart commitments. The programming of the proper use of all these substantial resources in the coming years, as well as the implementation and evaluation of the projects, will be of main concern to our Organization in the area of health planning.

In summary, health planning, including the human resources needed, the methods and techniques and the units created in each country within the Ministries of Health, have been essential in improving health services delivered to the population. Its orientation and approaches are being adapted to regional and national health policies and to the proper use of existing and potential resources. Within this context, more emphasis must be placed upon community participation for local health planning, and especially the programming for extension of coverage.

ELI GINZBERG

Let me simply say that I am not involved in international health problems. I have spent more than ten years looking at economic development problems overseas, and I am interested in American health problems. Let me very quickly set out what I have pulled out of my experiences at home and abroad that may be of some use to you. That is all I can do, both from the point of view of analysis and from the point of view of policy.

Let me begin by saying that I do know that in all delivery of services, the providers usually manipulate the situation and the consumers only incidentally get taken care of. That is a universal rule.

Looking at international health, it appears to me as if the Western countries, the developed nations, have been much too insensitive to local health systems. I was glad to hear Dr. Newell raise that point, because every country, no matter how poor it is, has a health system that has deep roots and is in some ways responsive to the indigenous population. A failure to be sensitive to that, in fact, is a serious danger.

We suffer many confusions in public policy, including the health arena. A popular notion is that if you put more resources in, you get more useful outcomes. Well, of course, that is ridiculous. We do not know whether there is any direct relationship between most inputs and the outcomes. It is a presumption that what you put in is positively related to what comes out. I have been watching the United States go from ten billion dollars to $125 billion expenditures for health in the last 25 years. You have to prove to me that we have done very much in terms of increasing useful output.

There is no such thing as an international standard of desirable minimum anything. When we talk about second best or third best, Newell again mentioned this point, it has to be best in relationship to the constraints, realities and potentialities of the country that one is considering. As I remember from my Asiatic and African trips, there is overemphasis in all service delivery systems on physical structures and new technology. There is little emphasis on the interaction with the human beings who are to receive the services. That is yet another manifestation of the dominance of the providers.

The best roads to Rome are usually the indirect roads. That is the critical point in Newell's speech. The idea that educators have is that the best way to get somebody educated is to put a teacher in the class and

the teacher interacts with the student. Actually this style of instruction may have very little to do with effectively educating people. We have the naive belief that the physicians and nurses have a lot to do with health. They do not. There are a whole series of indirect things that are really critical for health. Newell spoke of the need to involve the person in his own health education. It is not possible to have any outcomes that make sense, unless the individual is involved.

Newell raised the question of linkages. How do you get cumulative effects? How do you think about systems that are not presently linked? In the United States, one thinks about access, and one always thinks about more resources. Maybe all one needs is better transportation. That may be the most critical issue in access. Or, maybe a radio would provide access to critical information. In short, one must think more about linkages.

We must remember that most health systems are primarily supportive; they are not really technically efficacious. They are first and foremost supportive. Human beings suffering pain or trouble may be helped, but they are seldom cured. The degree to which medicine can effectively intervene is very limited. Most of medicine provides emotional support. Therefore, I am by no means sure that the local health systems in most low income countries are so ineffective. If a country cannot raise enough food, if it cannot clean up its water supplies, all other forms of intervention on the health front will have modest returns. In the face of malnutrition and multiple breeding grounds of disease, medical care can do very little.

In terms of the policy implications of these analytical observations, I conclude as follows. The most important thing that one can do is to start with whatever system is in place and try to improve it. The West never thinks about improving what is in place because we are so sure our system is superior. But it is obvious to me that one should start with what is available and try to improve it. So, if you could teach the local health people to do a little better--to wash their hands before they deliver women--that would be a good idea.

Secondly, I attach great importance to developing in LDCs more linkages in services for the poor. Years ago, I wrote a little paper on the interrelations of services to improve health, education, and farm productivity. The burden of it was that the curriculum should deal with health issues and should reflect questions related to farm productivity. In this way one

could get a cumulative effect by focusing on three critical dimensions of local life.

Another point is relevant to Newell's speech in terms of improving local health efforts. Can one encourage, bribe, cajole the local community to play a larger role in cleaning up its water supply, in trying to do something constructive for itself? If it does not do anything for itself, we know that nobody else is going to do very much for it. Additional resources are hard to come by. Unless you can motivate an outlying area to take some responsibility for itself, not much is going to happen. I believe that if a contemplated action is worthwhile, local people, no matter how poor they are, may even pay something to bring it about. They can pay either in the form of labor or in the form of very small amounts of money, if they think it is really important. And, if they do not think it is important, nothing is going to happen. So, I do not object to the notion of trying to get some minimum economic contribution out of the community. If one gives services away free, they will not be considered very important.

The next point is to try to get the least expensive, not the most expensive, type of medical personnel involved. One does not need many specialists. I have argued that, in the United States, Dr. Spock's book directed to high school graduates made a greater contribution to pediatrics than 10,000 additional pediatricians. The book enabled most mothers who could read to take better care of their own children. We have a fantastic misconception of the need for specialists. True, if you are to undergo a craniotomy, you had better get a specialist, even though he may not be able to do you much good.

The next point relates to Acuna's comments about planning. Planners always run ahead of realities, and that is their strength, but it is also their weakness. Reflecting on what I observed in Ceylon, Ethiopia, and other LDCs with anti-malarial compaigns, one must worry about what happens after the campaign is over. After you clean something up, the source of the trouble reemerges. Unless one can alter the general social and economic environment, a lot of money gets wasted. A big effort is made and is successful, but pretty soon the diseases reappear. One must not overemphasize the rationality of planning. While I am an economist, it makes no sense to me to think that human beings worried about pain and hunger will act rationally--whatever that means. All one wants to do is to avoid foolish

and unproductive expenditures. The larger the resource commitment, the more important it is for decision-makers to think before they act.

How does one make use of successful demonstrations? One arena for such demonstrations is the military. The military teaches every recruit how to take care of himself and teaches groups of recruits how to improve their living conditions by building latrines. One suggestion is that LDCs review their own experience and try to diffuse those things that work well.

Nothing much is going to happen, in my opinion, in the near term. The West has been working with too short a time dimension. It is understandable that the pressure has been to collapse the time. People are suffering, people are dying, but the one thing that I have learned about social change is that the time dimension is critical. If you look at Russia after 60 years as a communist society, there are important continuities that go back to the czars. Social institutions do not change rapidly, at least not the basic ones. Unless one understands that, one is in trouble, because one then tries to do things that have little chance to succeed.

There is one critical challenge that Newell did not address. Is there any way of identifying subgroups in a population whose health could be improved that would make a difference in terms of economic productivity? It is clear that in a labor surplus country, if one saves babies, you are really not doing much to improve conditions. If one could save 20 year-olds, who would otherwise die, that might make a difference. Aside from the human issues involved, saving babies is important over the long-run because it is an essential precondition for family planning. This is a tricky, but worthwhile, issue to think about. Consider the USA: We spend 25 percent of our health resources for people who will never make any contribution again to the economy in the United States. I happen to be reaching that age. I am very interested in health services for the aged, but they contribute little if anything to productivity. In fact, they may stand in the way of increasing productivity by consuming valuable resources.

I would end by saying that most of the experience of the Western world is not only irrelevant, but downright dangerous as a model for the LDCs. I cannot inagine anything worse than taking our ineffective US health system and exporting it abroad.

Further, implicit in Newell's statement is the concern that you cannot expect the health frontiers to move

very much faster than the rest of the society. The great weakness that I see, regrettably, is that in most parts of the world local cooperation is so difficult. Most LDCs are characterized by great inequality, with a few rich property owners dominating the community and making it very difficult to get any constructive cooperative action from the people themselves.

Most of the gains in health in the LDCs will come as a result of more food, more education, more sanitation. The health-education linkage is important because education, like health, requires engaging the individual in his own development. Unless you succeed in engaging the individual in his development, nothing will happen.

This is my cautionary tale based on what I have learned from many years of research into the role of human resources in economic and social development. I was pleased to listen to Dr. Newell. What I learned from him was that WHO, after having encouraged the West to run in one direction for 20 years or more, has finally decided to go down another track. I would encourage you, without getting into the specifications of what he laid out, to go down the track he has sketched.

PHILIP CAPER

I enjoyed Dr. Newell's remarks, and I agree with almost all of what he said. In fact, I agree with almost everything that has been said this morning.

In order to place my participation in this program in perspective, I probably ought to note that this is my first time as a participant in a meeting devoted to international health. I am a physician who, for the past four years, has had an opportunity to observe the American health care system from a legislative perspective. As a member of the staff of the Senate Health Subcommittee I have been privileged to participate in a number of study missions overseas to developing countries. My remarks are based on that experience that includes trips to Southeast Asia during the period immediately following the cease fire in 1973, and more recently to West Africa, Egypt, Pakistan, India, Bangladesh and the Philippines.

First and most importantly, I believe it is impossible to think of health in developing countries in a vacuum. There cannot be effective health services in the absence of economic development, particularly in the rural areas and in the poorest areas.

The retardation of physical and mental development during the early years as a result of inadequate nutrition, the repeated cycles of infection as a result of inadequate sanitation and the unavailability of a clean water supply, and the impact of agricultural productivity at the local level on nutrition and, therefore, health,are all factors that cannot be considered independent of one another. This interdependence is the theme of the remarks this morning and has prompted a reevaluation and reorientation of World Health Organization policies. It is also the thrust of what I hope I perceive to be emerging foreign policy, with respect to foreign assistance, and of other international organizations such as the World Bank.

There appears to be a general consensus emerging that these factors must be considered as a part of a whole that relates to an improvement in economic status, in productivity, in income, and perhaps most importantly in the ability of the rural areas of developing countries to become self-sufficient in food production.

I certainly agree with Dr. Ginzberg that family planning and the question of infant mortality cannot be separated in a society where labor is intensive and there is no meaningful social security mechanism. Therefore,

in such societies children, and particularly sons, are seen to represent important contributors to the family's agricultural productivity, and the only hope of support for people in their old age, when they themselves are no longer productive.

Of the developing countries, most in South Asia, I have observed, the most optimistic and the most effective changes appear to be a result of the decentralization of development efforts. Villages that were, relatively speaking, the wealthiest, even in countries as Bangladesh, had made the greatest advances in productivity and had moved furthest toward self-sufficiency in food and a better life for their people with remarkably little help and assistance from the central government. They had done so as a result of a change in social structure at the local level accomplished under the leadership of a particularly dynamic and particularly charismatic individual. This local leader was able to convince the villagers that besides their obligation toward their family they had an obligation to the village as a whole. By helping the village, they could help themselves. This is a common theme in South Asia.

What role is there for central governments in development efforts in the poorest countries? I think the recommendations that Dr. Mahler has made with respect to the creation of interdisciplinary councils are important and deserve careful consideration. However, we must recognize the very real limitations of what central government alone can achieve in developing countries where communication is poor and where the level of literacy is low. The villager, for example, in Assam, a state in India, is relatively little affected by what is going on in Delhi, one thousand miles away. I think that the question of decentralization is an extremely important one in terms of improving economic development and thereby the health of the people in villages.

I will not repeat what has already been said about the changing role of the physician and other highly trained health professionals in delivering health care. I agree with most of what has been said. The impact of physicians alone, particularly in developing countries, is marginal at best.

I would like to note, moreover, that even in the United States, Canada, Great Britain, and a number of other developed countries, serious questions are being raised about the effectiveness of highly trained physicians and expensive technologies on the health of our own people.

I believe that reexamination of the cost effectiveness, if you will, of expensive medical technology on the health of people in this country, and the reexamination of the importance of other factors, such as lifestyle, alcohol consumption, smoking, lack of exercise, and overweight as a determinant of health status, may make it somewhat easier in the developing countries to plan their health systems. They are freer to look toward professionals and health workers other than university trained physicians as a more effective and certainly more easily attainable type of health manpower. I think it possible that emulation of the Western model of technologically oriented medical care by developing countries may actually have been counterproductive.

I would like to emphasize, once again, the point that Dr. Mahler has repeatedly made; that it is not a question of second-rate health care for developing countries, it is a question of what kinds of health personnel are the most effective, the most achievable and the most appropriate. I believe that even in countries such as ours, we are beginning to look at other factors, factors other than curative medicine as determinants of health status.

On a related matter, it seems to me ethically and morally wrong for a country such as the United States or other developed countries to be draining highly trained personnel from countries such as India, Pakistan, the Philippines, Thailand and elsewhere. It is equally important to examine the other side of the coin, though, and question why these countries are training health care personnel who are better fit to deal with the health care problems in the United States than those of their own countries. In many developing countries, physicians who have been trained after the Western model simply cannot find employment. Their training is just not relevant to the basic health needs of their own countries, and these are problems which must be faced.

The role of central government in achieving health goals and in meeting the very real needs of their own people is open to speculation.

We have the recent example of India where constitutional guarantees have been suspended and power has shifted toward the prime minister. What does democracy mean in a situation where the illiteracy level is very high and where there are tremendous barriers to communication? What does an election mean in a society where most of the people nominally participating in the elections have no feeling that their participation has much

importance to their day-to-day struggle to subsist? Can such a model really work in taking on the very difficult problems of those countries? That question is being tested throughout the world today. Whether or not the poorest of the poor can be helped, given existing political constraints in many developing countries, is something that remains to be seen. Whether the developed world should help developing countries is, in my view, a more easily answered question. It is very difficult for me to return to the affluent United States from villages in Bangladesh and India where 40 percent of the children are grossly malnourished, where vitamin deficiencies are rampant, where kwashiorkor is seen commonly and where people are literally dying in the streets.

The question of equity and the moral and humanitarian questions concerning the distribution of wealth are ones which, I think, are quite clear. The political climate is less clear and more difficult to predict. However, I see some encouragement in the emphasis currently being placed by volunteer organizations and legislative and executive branches of our government on assistance to the poorest of the poor. I see encouragement in the discussions of a new economic order. The developed world cannot turn itself into a fortress and ignore the fact that most of the people of the world are living at a level which is one of bare subsistence.

I would just like to mention some possible forms of assistance that I believe the United States can offer, given the existing political climate in this country, our own problems with inflation and unemployment. These are obviously going to pose rather severe constraints on what anyone can do, in terms of foreign assistance, at least until those problems become somewhat less acute.

There are some things, however, that I believe can be done and have already been started. First of all, an area of foreign assistance that is often somewhat overlooked is the development of technical ability and the transfer of knowledge. The United States, with its scientific and medical expertise, can make a contribution toward developing technologies for the less developed countries of the world. The support of international agricultural centers will continue to be important.

As a member of the staff of the Senate Health Subcommittee, I can predict, I think, with a fair amount of certainty, that there will be increased emphasis on basic research support relevant to the needs of the developing world, in our own National Institutes of Health. Senator Kennedy is most interested in promoting this development. An increase at the Institutes in the level of support to

research related to the immunology of parasitic diseases is very important and will complement the burgeoning efforts of the World Health Organization to eradicate parasitic diseases that cause a great deal of morbidity in the world. Senator Kennedy also has indicated that the National Science Foundation should review their efforts which are of international value. The technology in the development of nitrogen fixing organisms of all kinds, of high protein legumes and cereals and foods that are relatively less expensive to produce than fish or beef, would help alleviate the nutritional problems that are at the base of many health problems in these countries.

In addition, there will be strong support in the Congress for disaster relief efforts in order to avert the kinds of devastation that have taken place recently in India and Bangladesh. There is strong support for a food banking system to assure a relatively equitable and stable source of food supply. Ginzberg has mentioned the importance of health as a factor in productivity. It does not take an expert of any kind to realize that an engine does not run without fuel, and that applies to human engines, as well as any other.

I conclude my remarks by stating that as far as the health professions are concerned, and people with backgrounds similar to ours at this conference, it is extremely important to recognize the limitations of the Western model of curative medicine, not only in our own country, but particularly in developing countries.

We have tended not only to encourage the development of western type medicine in developing countries, but we have been emulated by them. This situation is turning about, and will be assisted by our own examination of our own current medical practices in this country. It is an extremely helpful development, but again cannot be viewed in a vacuum. I think it has to be viewed in the context of overall economic development and self-sufficiency at the local level.

INQUIRY AND COMMENTARY

ELI GINZBERG: Let me tell you what I heard this morning. listening to Newell, Caper and Acuna. There was repeated and understandable emphasis on structure,

organization and planning. But all of these organizations, no matter how thoughful they may be in their formulation of programs, have very little to do with the specific transformation of human life. The gap between plans and actions is unbelievable.

I was interested to hear Caper indicate that the most important single change element was the presence of a local leader able to influence local people to work together to do certain things cooperatively that they could not otherwise accomplish. As Americans, and maybe even as Europeans, we have the distorted notion of the reality of government in most parts of the world. Dr. Caper talked about 1,000 miles between New Delhi and Assam. The outstnading point that has struck me in my many trips overseas is the fact that effective government is an exceedingly rare resource. Few governments are capable of doing anything significant to alter the conditions of life of their people.

The extent to which government is the critical factor is underscored by contrasting India's approach to health and the Chinese approach to health. I keep a considerable skepticism about what is going on in China, believing as I do that basic institutions change slowly, even in the presence of a revolutionary cadre. Nevertheless, it appears that the Maoists have been able to transform the extent to which people are forced to cooperate, which sets the stage for many things to happen. The China I knew in 1945 was full of flies. Visitors now report that China is free of flies. That is very impressive.

Too little has been said, I think, about the attitudes of the individuals whose health one is trying to improve. There is a linkage in every society among the value structure, the governmental structure, the economy, and the manpower development institutions. This is the analytical framework of my life's work, now in press, called The Human Economy. It is very hard to change health unless other parts of the value system change. Nevertheless, it is important to focus on health, because I believe all human beings are interested in the reduction of pain and in postponing death.

Perhaps the one common element in the whole of mankind is the desire to alleviate pain and to postpone death. Hence, to think more imaginatively how to bring about modest changes in health could accelerate changes in the entire value structure. I would also

stress changes in education. Only as people gain some perception of the changes that they can bring about in their own lives will they really become involved in cooperating to alter their environment.

As an economist, I have not heard enough about using the infrastructure that exists in every LDC. For instance, all societies, even the poorest, have a system for bringing scarce goods to the rural areas. Farmers must buy salt. They have to buy other essentials. The question may be how one can piggy-back health efforts, i.e., birth control, on the trading system. More attention should be paid to bringing the health system together with the economic system, and use each to reinforce the other rather than to encourage each to go its separate way.

The worst thing about health systems is that planners tend to structure it as a separate and independent system. That is the most costly and ineffective way to move ahead. Even in the rich United States, druggists who are part of the trading community represent first-line medical personnel for many people. The local health expert is the druggist!

I wanted to say that, as a long term student of manpower, I agree with Caper when he suggested that the U.S. is not really draining health personnel from overseas. I never saw an active recruitment campaign by the United States to pull physicians out of the Philippines or India or anywhere else. The inappropriateness of indigenous health educational systems lies back of the out-migration.

In some countries such as Argentina, it is my understanding that it was policy to overproduce physicians for the purpose of exporting them. Although I am willing to blame the United States for lots of mistakes, I really would not blame us for "stealing medical personnel from overseas." That is really not the essence of this story.

JEFFREY SMITH: Dr. Ginzberg, could you please identify ways to minimize the gap between the seemingly increasing demand for acute facilities, vis-a-vis the need for preventive services overseas?

GINZBERG: Any increase in the availability of health services will always be consumed, especially if people do not have to pay for them directly. There is no limit to what people will use if services are made available. If one says that there is an acute demand

for additional acute health services, I say, what do you mean by demand? Do you mean that government is under pressure to create additional services and cover their costs by new taxes? I understand that. Or does one mean that the citizens directly want more and will pay for additional services through higher preminums? That I doubt.

When it comes to prevention in a developed society, I wonder where the shortfall lies--not with society, I believe, but with the individual. One cannot get the average citizen to reduce his intake of alcohol. One cannot get him to reduce his intake of fatty foods. One cannot get him to drive carefully. These are the critical frontiers as regards prevention in an advanced country, and they are difficult to master.

One of the great troubles both in the developing and the developed world is that we know so little about how to intervene with the human being to care better for his own health. This is not a minor matter but a major hurdle. That is why I put such importance on Dr. Spock's book on baby care. It really got through to mothers.

One can develop a health care system to a point where there is one physician to one person, as is the case in the United States with the President. Short of that, I do not know where the system will stop expanding. Perhaps it will finally do so when more people come to realize that access to medical services can be dysfunctional. I advise all of my friends not to go into a hospital unless it is urgent, because such an encounter may be negative, not positive. When the public begins to understand that and acts on it, we may begin to reach a ceiling.

FRANK GAULDFELDT: I am from the Office of International Health at HEW. I would like to address my question to Dr. Caper.

As I understand it, you have become convinced that where development takes place and health is improved is at the local level. Speaking in terms of the United States' involvement in bilateral health, for instance, it is a government-to-government relationship. We are assuming, or we hope, that eventually it will filter from the top down. But, we all know that going from the bottom up would speed up the process. Do you have any ideas on how, officially, we might reconcile these two points of view? Thank you.

PHILIP CAPER: Well, yes, I do. That is one of the problems of bilateral assistance. It tends to be caught up in intergovernmental politics. I think it is important to increase our government's contribution to multilateral organizations and to voluntary agencies.

Now, a good deal of very good work is being done at the local level, as you know, by voluntary agencies and by private foundations. That, I believe, is one of the reasons why Senator Kennedy has for many years been trying to increase the U.S. emphasis on multilateral versus bilateral assistance. There will always be the need for bilateral assistance, and justifiably so. But I think that one of the problems with such assistance is exactly the one you have pointed out, that it has to become involved in politics. Assistance to Bangladesh has to be linked to Middle East politics in some way, so long as it is a government-to-government relationship.

The problems that WHO is having, that I hope will be temporary in nature, in obtaining their assessed contribution from the United States is directly related to politics having to do with Southeast Asia.

Nonetheless, this is a problem which is even present in multilateral assistance. It is particularly acute in the case of bilateral assistance.

RICHARD COPPEDGE: I am from Management Sciences for Health. I would like to take issue with a couple of statements briefly. Dr. Ginzberg's statement that so long as the services and facilities are there, they will be used.

I think that in some countries this is not true. When you see hospital occupancy of 30 percent on the average, there is something wrong with the service or there is something wrong with the interface between that institution and the community. And, there are out-patient facilities equally underutilized.

So far as working from the bottom up, I do not think that this will necessarily go faster, unless you start simultaneously from the top, or unless, on the other hand, there is a revolution, which may or may not be successful.

I think the approach needs to be multilevel in a country. I certainly agree wholeheartedly with Newell and others that successful health efforts must be community based and interdisciplinary. There is a kind of activity called informal education, which is

based on community activities. The people, who try to educate individuals in a community in this approach, do this by bringing common problems to an individual consciousness. They organize to meet these problems, which are social or economic, and this facilitates communication.

This approach, I should think, might be quite useful to the community health worker, if he can learn the methods of interesting communities in their own problems, most notably health problems. Then, he might be much more successful in motivating individuals in their problems and helping them to help each other in solving these problems.

I should think that with respect to training health workers, one of our major deficiencies has not been in the technology of medicine, but in the technology of meeting and organizing communities. We could learn from other people in this matter.

Finally, in assessing success of health programs, we have looked at health status as measured by many numbers of indices. But have we looked concurrently at the success of other programs in the same community, the educational program, the agricultural program? Has there been a coordinated assessment of the community development as a whole, and the element which health plays in this total community development?

CAPER: Just one quick response to that. I think it is important to recognize one fact of life in the United States and other developed countries. The health care industry exists to promote health largely as a secondary matter. It is best, I think, at producing large amounts of cash flow, which amount to $120 billion a year in this country.

Earlier, I alluded to the political interests that keep the system in this country from changing. Obviously, a lot of people have a great pecuniary interest in keeping things just as they are, the insurance industry, the pharmaceutical manufacturers, medical device manufacturers and the hospital industry.

In a country such as this, we can afford to do that. We are fortunate. We can choose between an extra visit to the doctor or an extra few days in the hospital or another color television set. In a country where the per capita income is $200 or $250 a year, they do not have that luxury. I think it is extremely important when talking about exporting Western technology to other countries to recognize

that very simple fact. I do not agree with Dr. Ginzberg that there is no way to control the utilization of health services, other than payment at the time of the doctor/patient encounter. I think Great Britain, among all of the Western countries, has shown the greatest success in restraining increases in their total national expenditures for health care. Yet there is no payment at the time of services delivered.

Maybe a continuation of the situation leading to the story in the Washington Post this morning, which reported that there will be a 48 percent increase in health insurance premiums for 200,000 people in Washington for the third successive premium increase, will lead us into an on-the-budget approach as the way to contain increased expenditures.

HECTOR ACUNA: Thank you, Dr. Caper. Well, you have heard Dr. Ginzberg and Dr. Caper, and a few commentators from the floor on this very interesting subject. Perhaps the important thing to bring up in closing is that of policy planning. I do not feel quite qualified to say that I represent that particular area. However, let me just give you an outline very briefly.

I am an elected Director of the Pan American Health Organization, the 27 member governments of this organization and three associate members. Now, I am supposed to speak on behalf of those governments in the health sector. Believe me that one of the things that these people are interested in is knowing how to deal with their own problems.

My concern is, then, in listening to you and seeing what you have to offer to the health ministries of the Latin American and Caribbean governments. I am afraid that I have not listened to anything extraordinary. I have not listened to anything that is new or innovative, or at least economically feasible. I have been listening to things, or schemes, or ideas that cannot be adopted by Latin American and Caribbean countries.

However, this is the planning process to which we were referring before as being the keynote of this particular panel. I hope that in the other panels we will find answers to these particular dilemmas that the countries of the developing world are facing. Not only are answers required to meet their own needs, but perhaps answers are forthcoming also from the academic community and the medical and health professions of the United States as to their role in meeting these needs.

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KEYNOTE PANEL
The Modern Health
Establishment

Henry L. Feffer, Chairman
David M. French
Alfred M. Freedman
Paul Zukin

DAVID M. FRENCH

I am going to try to draw upon experiences that I have had in the last several years as an observer, both in Southeast Asia and in Central Africa, to indicate what might be done in the future to try to meet some of the health care needs of developing countries. The African and Asian areas were formerly under colonial rule for 50 to 100 years, but all had been subject to European influence for a much longer period. Both areas are tropical, though Africa has more variability relative to rainfall, ranging from desert to tropical rain forests. Until recently, neither has been subject to severe population growth pressures. In both areas, indigenous societal organizations have been able to maintain stability within the surrounding environment.

There are differences in the concept of nationhood and land ownership in the two areas extant at the time of independence. Nationhood in Southeast Asia seems to have much in common with European concepts in the past. European colonialism readily asserted itself, and land control rapidly followed. In Africa, tribal concepts of land ownership were far different from Europe; in addition, geographical topography in many ways precluded subdivision of land. Consequently, we see today a vast mismatch of national boundaries as a result of European influence that has no relationship to tribal areas and little domination of the land in many areas in terms of strict individual ownership.

The ever increasing impact of Western society, with its need for cheaply produced raw materials and cheap labor, has dealt with both of these areas rather poorly. Indigenous traditional survival mechanisms were unable to cope with new technological demands. Technology created

severe stresses through reorganization or modification of societal structure. New disease was introduced and the incidence of indigenous diseases increased. In response to the mounting threat of rampant disease, the colonial subjugators created a medical care system to protect themselves and care for that part of the native population essential to the economy. Alas, the medical care system was modeled after those in the modern Western countries. The engrafted medical care system from the Western world could not meet the health needs of these developing country areas.

For several years now we have heard about medical care delivery changes in China, Cuba and Tanzania, for example, that have resulted in the eradication of social diseases and improvement of maternal and child health care by using unusual deliverers of health care, such as barefoot doctors. Although the information is incomplete, there seems to be little doubt that a vast reorganization of the Chinese and other medical care systems has indeed occurred. At least two things stand out relative to these changes: (1) Improvement in health status was related to new uses of manpower, whose major thrust has been in prevention, and (2) these health system changes went hand in hand with changes in the political system.

I with several others have had the opportunity in North Vietnam to examine such changes in a medical care system. North Vietnam has totally revamped its system of medical care delivery. Simultaneously, South Vietnam was undergoing development, primarily under the influence and financing of the United States. The nature of system development and the outcome in North and South Vietnam was far different. It is interesting to make some observations about them.

In North Vietnam, at the end of colonial rule in 1954, there were 100 physicians and 200 assistant physicians, with perhaps 4,000 hospital beds available. The population was 15 to 16 million. During the ensuring ten years, prior to the resumption of warfare, the reorganization of the medical care system occurred along with the development of new health policy. With lack of funds and health professionals, they did that which they could afford to do, and proceeded to maximize their approach as best they could.

First, they focused their efforts on prevention. This effort required a minimum of technical know-how and skill to deliver. It is not as costly in terms of unavailable medications, and the facilities necessary for the whole process were also minimal and rather simplistic in

design. Second, the building of the health care system began at the bottom of the pyramid, that is, at the village level. Third, the necessary manpower would be developed as rapidly as possible to get the system moving, even at the expense of treatment capabilities of that manpower. Trainees initially were turned out as rapidly as possible; refresher systems provided continuing education to increase their capability as time went by.

A few comments are in order about the rationality of these policy decisions and what they meant in functional terms. Prevention, if one observes what went on, was defined not in complex terms, but functionally. Prevention efforts focused on immunization of the population at risk against certain infectious diseases and public health methods to disrupt the chain of infection. Structuring of the health care system at the village level was dictated by functional realities. It was a time of national emergency, with an emerging political system that required maximum individual commitment in every village in the land. Rapid production of manpower was perhaps the only one possible alternative under the circumstances. It required, however, a high degree of commitment and ability on the part of those in responsible positions. They needed to train new deliverers of health care to provide effective care and at the same time sustain the commitment and enthusiasm of these new paraprofessionals.

It is not the purpose of this paper to deal with the statistics such as they are, because they certainly are not extensive or particularly exact. But, there is little doubt that massive inroads have been made in controlling the major disease killers and cripplers within the North Vietnamese population. Traditional infectious diseases such as gastroenteritis, malaria, venereal diseases and the traditional killers associated with the birth process and the neonatal period were all markedly reduced.

In South Vietnam the medical care system was undergoing great change by responding to a massive influx of Western curative medicine and technology. The increasing presence of European and American personnel required a large medical care delivery system. Western medical presence on the field of battle was a military necessity, of course, and was exceedingly effective in dealing with war casualties. The United States, as part of its development program, also tried to bolster the various structural components of the Vietnamese health services. We began at the top, with the Health Ministry, and proceeded to the provincial medical structure. A number of changes occurred in the national hospitals, particularly

in Saigon, the provincial hospitals, and the medical education system. However, only toward the end of American presence was a system of maternal and child health care developed and a school of public health created with a practical dedication to change at the village level.

True comparisons between the health services of North and South Vietnam are not possible for a number of reasons. The location of most of the warfare was in the south. The North Vietnamese admit that their successes were made possible by the nine years of peace between wars. Although the cost was vastly greater in the south, the funds were available. If funding had been allowed to continue, it is hard to say what would have ultimately happened at the village level relative to health care. But, comparisons have little meaning in the context of what might be learned for developing countries elsewhere. There is little doubt that the approach of the North Vietnamese was effective and affordable and extremely successful in terms of meeting their health care needs at the time.

The challenge in Africa is that we now stand in a position to be most responsive and helpful. We are at a time when African national and regional development can be fostered through mutual collaboration. Not only have contributors such as the United States learned from collaborative experiences, but, more importantly, the multinational resources of the U.N. are being mobilized. The report of the UNICEF-WHO joint committee on health policy recently issued outlines alternative approaches to meeting health needs of populations in developing countries. It is well worth reading. I quote briefly from the introduction:

"To meet effectively the main health needs of underprivileged populations, which represent about 80 percent of the people in less developed countries, health services should actively seek out the persons, learn their needs and desiderata, and protect, treat and educate them. Unfortunately, the strategy so far adopted by many developing countries of modeling their health services on those of developed countries has not been conducive to serving needs as described above, and has therefore failed.

Drawing upon other successes, we must promote expanded health care approaches through indigenous personnel who are already firmly inserted in the social structure of the villages, much as the North Vietnamese

did. The utilization of indigenous village personnel is proceeding on a large scale in Tanzania at the present time. Other successful examples have been seen in Upper Volta, Mali and Niger. In Upper Volta and Niger, these exist as isolated but highly successful models. In Mali, an entire system of rural dispensaries with maternal and child health units exist dispersed throughout the land. They are almost completely manned by paraprofessional personnel. The functional capability of the system, however, is quite small, but it is firmly a part of the government's national plan for improved health services. Somalia and Zaire represent two additional states wherein national commitment to planning and development of primary care is firmly established.

In summary, there are places in the developing world where things are being done. They are being done in ways different from the Western model. The primary care approach as a model is much cheaper and much more effective in terms of meeting the health care needs of these developing lands. The three principal features of this model are, applying the principles of prevention, creating new manpower resources, and developing programs with community involvement. The success of these programs rests in their being part of the fabric of the social structure of the communities which they serve. I think this is where the future for the health care delivery systems lies.

ALFRED M. FREEDMAN

An essential prerequisite to delineation of the training, utilization and distribution of manpower to meet emerging health care needs in the world is a clear definition of the desired end product of our educational efforts. To arrive at this definition requires several important steps. First, a clear statement of the desired health delivery system's objectives, its policies, its priorities, short-term as well as long-term goals, and its organization is necessary. Each nation must develop such a statement in accordance with its own resources, its own stage of development and objectives. Second, having made such a statement, then one must determine the duties, the roles, and the behavior of personnel who will participate in delivery of the described health care program. The third necessity is development of training programs, including medical curricula, to prepare individuals who will possess the variety of skills, behavior, and commitment necessary to participate in the desired program. While this paper will focus on the training of the physician, I believe the same principles hold for the paraprofessionals as well as indigenous health forces.

Why is this particular sequence necessary? The tendency is to think of medical education as an isolate, with little regard for outcome. We often seem preoccupied with the educational process, rather than achievement of that combination of knowledge, attitude, and skill which is essential in the finished product in order to make maximum contribution to the anticipated health care system. It must be the end product that is in the forefront of our concern in medical education.

Certainly, it is true that in the United States medical schools have been seeking change. But they have concentrated on process. For example, we have changed the sequence of courses, or emphasized early clinical experience, or changed to organ systems models. But there has been no clear concept of the desired outcome in regard to the work of the future practitioner. Thus, changes consist essentially of new labels, new packages, new titles. All these rearrangements are essentially pouring old wine into new bottles. Too often, medical school curricula are petrified into traditional approaches; or, when changes are demanded or necessary, the change is often dictated by fad, whim or caprice.

It is generally agreed that optimal health care delivery systems provide for comprehensiveness and

continuity of responsibility in case management. The program is addressed not only to the individual but to his family, and ultimately must include the community. Such a system involving comprehensiveness, continuity and responsibility is referred to as a primary health care system. Such a system, configured to the needs of a particular nation, must be spelled out clearly, since the job description of an individual in the system, such as a primary physician, will shape the training program and the curriculum. This is necessary in order to insure the proper end-product: a primary physician.

The key word in this is primary, and one must think of the various meanings of this word. Primary means first in sequence. A primary physician is the first access physician. But there is an important implication in being first in sequence, since a primary physician must guarantee continuity of care. Therefore, he must also assume continuity of responsibility. Primary also means first in generality, as illustrated in the phrase "primary colors." This implies another important aspect of the primary physician--that is, comprehensiveness. The primary physician must be skilled in attending to all aspects of the sick or troubled individual--physical, psychological and social. Further, the primary physician must be able to attend to the specific health needs of the individual, rather than to individual pathology.

Lastly, primary means first in authority, as a primary leader. This implies ability to provide leadership, to be able to coordinate the various aspects of what often is a fragmented, chaotic system. As the patient moves through the system, the leadership exercised must provide direction, control and attention, rather than random, incoherent movement. Authority implies responsibility; responsibility is verified through accountability of the program which the primary physician leads.

It can be seen from this definition that the primary physician is in a commanding role and deserves the highest regard, status and prestige. The primary physician should not suffer by invidious comparison with the specialists. The primary physician in a comprehensive health care delivery system must be able to address himself to the many aspects of such an organization. Thus, the primary physician must have the skill to evaluate not only that part of the total system in which he participates, but must be able to view the totality of the system, since no part can operate in complete isolation. Such a system must have high

quality and must provide access for all consumers. The responsible physician must be concerned about those who do not receive--as well as those who do not seek out--health care.

Health care delivery systems are continually beset by issues of fiscal support. The primary physician must understand much more than cost-benefit analysis and simple-minded efficiency. Efficiency and productivity of individuals in the system cannot be ignored, of course. However, the criteria of efficiency must be integrated with equity and effectiveness. Equity is necessary so that everyone receives a fair share of services. In regard to effectiveness, one must move beyond utilitarian concepts of the best possible for the most. To be truly effective and have equity and efficiency, one must strive for justice in the health delivery system. This implies that there is a floor of reasonable quality below which no individual's services can drop.

Thus far, I have described a primary health care delivery system and some of the characteristics required of the primary physician who participates in such a program. These characteristics must include a commitment to comprehensiveness, continuity, responsibility, accountability, leadership, and a broad knowledge of the social system of primary health care.

It is particularly important to keep these characteristics in mind today, because the trend of development of modern medicine, which has been without planning in regard to the necessity for effective delivery of services, tends strongly to produce over-specialization. The substance of health care services has been profoundly changed in this century because of new science and technology. Sophisticated technology has had tremendous effect upon access, quality and finance. Complexity has given rise to specialists, who have achieved great status and prestige. However, super-specialists can only practice in sophisticated centers that can support their specialties and this has encouraged maldistribution, which, in turn, restricts access to care.

One must remember that in the United States in 1905, 85% of health services were delivered by physicians--M.D.s. The health industry then was mostly composed of doctors who were generalists. Today M.D.s comprise less than 5% of the health industry in the United States. The division of labor has grown finer and finer to accommodate the complexity of the armamentarium of the health care profession, particularly in regard to specialization and subspecialization, which continue to escalate.

Services have become segmented and fragmented, resulting in discontinuity and alienation between consumers and providers. In addition, with the new technology, the expense of providing care has escalated geometrically, if not exponentially, causing grievous concern to those who support the system, whether it be government, insurance companies or individuals. In the face of the insecurity that is felt, various arrangements are demanded in the form of insurance by private or public organizations. This has led to increased pressures of a political nature.

We live in an era in which the lack of excellent health care is being redefined as an injustice, rather than a misfortune. Turner has pointed out that when a social deficiency becomes so redefined--from a misfortune to an injustice--social change takes place. Thus, the French and American Revolutions occurred when the lack of franchise and denial of freedom of religion became redefined from a misfortune to an injustice. Likewise, many of the profound changes of the 20th Century have taken place because the lack of material necessities became redefined from a misfortune to an injustice. I believe we are now in an era in which the lack of good quality health care has been redefined from a misfortune to an injustice. The enormous pressures which have built up, both through public demand and through the political process, for the creation of a quality health care system force the need for new approaches and new designs for the organization of health care delivery. There is danger, in the face of these pressures, to offer expedient solutions that have broad, long-range consequences which may be unanticipated. Simple application of new science and technology may lead to maldistribution and superspecialization. This is true presently in the United States.

In the face of these tremendous pressures, it is essential to maintain the goal of training personnel to participate in a primary health care program. This is not to say that specialists and sophisticated centers are unimportant; they are critical and essential. However, they must be part of a total health system and should not dominate and drain off all of our possible resources. One has to decide upon an equitable distribution of resources, particularly manpower, and train accordingly.

The trend toward specialization and emphasis on secondary or tertiary care, that is hospital care, can be illustrated by a brief review of the history of medical education in the United States. In the early 20th century, there were a large number of medical

schools in the United States of varying quality. Many were simply commercial, proprietary, vocational schools, while others were of high quality, and many fell in between. A study by the American Medical Association, followed by the famous Flexner report which was supported by the Carnegie Foundation, laid the groundwork for a profound change in medical education in the United States which has been little appreciated. Although the motivation of the AMA and subsequently of Flexner were probably quite different, the results were similar. Flexner was exlusively interested in the process of medical education. He was convinced that if the model of Johns Hopkins and German medical schools was adopted, involving heavy emphasis on laboratory training and hospital training, with full time faculties affiliated with universities, that medicine of the highest quality would emerge. Time does not permit a full study of the consequences of the Flexner Report so as to weigh both its benefits and negative aspects. Fly-by-night schools were eliminated, but, on the other hand, Flexner had an elitist approach and scorned training of minority individuals, for example, Blacks and women. Thus, black medical schools were decreased from 7 to 2, and many women's medical schools also fell by the wayside. Flexner's emphasis was upon hospital practice and experience, as well as sponsoring high technological efficiency. Thus, American medicine became increasingly hospital-based and specialized.

There were other forces at work, and American medical education followed the Flexner Report more literally than Flexner desired. He even commented, in 1925, about the rigidity with which his recommendations were followed, thus destroying flexibility and experimentation in curriculum.

In any event, the road toward superspecialization and hospital-based practice was developed, with the consequent lack of primary health care personnel, maldistribution, fragmentation of services and other deficiencies already noted. We are now trying to turn back to primary health care in the United States, and substantial effort is being made to train primary health care physicians. It is a revival of old ways, but under new conditions with new levels of integration and new technological knowledge which must be applied. However, as we look for new possibilities, we must look for linkages of the full range of health and other human services at all levels of practice--personal, family and community. The level of practice for the future must

certainly be at the level of community, and one must recommend development of a community orientation in the delivery of health services

With the goal of community practice of primary health care, what are the implications in regard to medical education? If the previous goal of medical education in the development of hospital practice was bedside teaching, then primary care health centers away from hospitals must become an important focus of training of primary care physicians. This can be part of a general medical education, or one may conceive of the development of specific tracks as well as development of schools of primary health care.

It would appear that a good way to approach this might be in a sequential form, going from courses in primary health care to specific tracks, career development in primary health care, and eventually the formation of specific schools to train primary health care physicians and other professionals and nonprofessionals. Team training will be of importance. An important aspect of training and the development of curriculum for the primary care physician is the development of attitudes--positive attitudes toward primary care. This would strive for development of high regard, respect and esteem for the primary care specialist. Through a study of the primary health care physician functioning in a model delivery system, one could begin a task analysis of appropriate behavior in the primary physician. On this basis, one could develop instructional objectives as to the attitude, skills and knowledge that are necessary.

It is the statement of instructional objectives that is most important. It must be the basis for curriculum building. By means of a statement of instructional objectives, students will have information to facilitate their learning, and teachers will be sure of presenting relevant materials. There is often a wide disparity between curriculum and practice. Hodgkin present data to suggest that, in Great Britain, the amount of time or emphasis placed on a particular problem during training in medical school and the occurrence of that disease in general practice are inversely related. This is probably true in many other places. The educational process should fit the instructional objectives. Too often the reverse is true, and the educational process produces an end product discordant with the practice needs.

To repeat, three major objectives that one wishes to see as end results are: acquisition of appropriate knowledge; acquisition of appropriate skills, and

acquisition of appropriate attitudes. Last, the consequences of such a curriculum must be evaluated in outcome studies of subsequent practice. Will the graduate of such a program remain a primary care physician, or will he follow the general trend toward specialization? Will he retain a commitment to serve the unserved? Will he remember the citizens for whom the health delivery system, the primary health care system, has been devised, and commit himself to the priorities so that this care can be delivered? Only through evaluation will we know whether the appropriate remedy is actually to begin at the end and work backwards. Thus, by beginning at the end, we may determine the future.

PAUL ZUKIN

In discussing the "modern health establishment," I will begin by first defining the term or the concept and then will consider what this means operationally as applied to the less developed countries. I would define a modern organization or establishment as one that is based on current thinking, current values, current ways of doing things, current approaches, current techniques and technology, etc. One of its characteristics is that it is adaptive and responsive and capable of changing both its values and its ways of going about goal achievement. The theme of this conference emphasizes changing approaches to health care and, in fact, what we are witnessing is that some of the techniques used in the less developed world are being hailed as a modern approach in the United States and elsewhere, while conversely, some of the sophisticated features of the health establishments in the developed world are being emulated in less developed countries, often with sorry results. So, at the outset, it is fallacious to talk about the modern health establishment, because this implies that a single type of health establishment could be delineated which would be generally applicable, and this is clearly not the case. I believe that there can be a variety of so-called modern health establishments, depending on the needs and the resources of the specific populations to be served. In this context, I would characterize a modern health establishment as one which will result in (but not necessarily provide itself) certain basic health services which are readily available and accessible for a high percentage of the members of the population to be served.

As you know, we used to talk about health establishments providing services for and to people. We now recognize that, for the foreseeable future, at least in the less developed world, the formal health establishment cannot provide all of the needed services and that, to a large extent, these services must be produced by and with the people.

To pursue the definition of a modern health establishment, I would like to discuss what such an establishment does and what its components are--not in the sense of specific services, but rather in terms of functions. And the functions and components that I will designate are basically those which are found in any modern organization which produces a service or a product for people. Thus, the modern health establishment involves four primary components or functions.

First, it assesses the health problems and health care needs and demands of its population, and it designs an appropriate health care system to meet those needs and demands. In management terms, this is called the "marketing" function and includes the needs and demands to be met, the products or services to be provided, i.e., to meet the market, the delivery system to be used, ways to promote services, and it considers the effect of price or inconvenience on utilization of the services or products by the users.

Second, it produces facilities and services, and, in so doing, makes use of transportation, communication and other infrastructure, all of which must be satisfactorily coordinated. Here again, appropriateness of the production function is of paramount importance. In the modern health establishment, facilities are appropriate to the system and services are produced in an efficient and integrated manner. This points up the notion that by building medical palaces, a less developed country can suddenly achieve a modern health establishment, something we all know is sheer nonsense. More often than not, these palaces turn out to be difficult to maintain and staff and are seriously underutilized, resulting in waste of scarce resources while failing to meet priority health needs.

Third, a modern health establishment makes effective and efficient use of finances; here we are concerned about the sources of capital and operating funds and their interrelationship, and the uses and control of these funds.

Finally, there is the matter of human resources. The modern health establishment appropriately trains, staffs, rewards and uses its health manpower.

Now it is obvious that not all needs/demands can be met by the production capability of a given health care system with its limited human and financial resources, and that a series of trade-offs, compromises, accommodations and adjustments must take place. Goals previously set may have to be changed as production capacity fluctuates, depending on the availability of financial, human and other resources. I would therefore characterize a modern health establishment as one that innovates and adapts, that is willing to develop new methods and techniques in producing services, in financing services, in using manpower, etc., so that the goal of broad coverage of agreed upon health services is achieved.

Assuming that a population is served by a modern

health establishment, does that mean that that population's health needs will be met? Unfortunately, the answer is no. If the establishment fails to properly identify its mission, it will fail to meet health needs, and this is what Dr. Newell and the other speakers this morning have called to our attention. The role of the health establishment in achieving health has not been particulatly effective in most cases. This gets to the core of the problem, namely, that health is a complex matter in which so-called health interventions are only one of a number of significant factors. So long as health establishments restrict their activities to providing primarily curative services, health needs are not going to be met. What is needed then is for a redefinition of the mission of the health establishment--a mission which in its delineation pays more than lip service to the all important linkages--to nutrition, education and community mobilization for health, and others. The broadening of the mission of health establishments to include these critical elements is gradually occurring in many countries, and I believe that we will see the development of increasing numbers of truly modern health establishments as those of us who participate in conferences such as this, make our influence felt.

INQUIRY AND COMMENTARY

HENRY FEFFER: Dr. Freedman, with your permission, I wonder if you could put on your other hat as a behavioral scientist. We have listened to descriptions of the modern health establishment under various conditions throughout the world. This morning we heard what the ideal should be, the direction we would like to go. You suggested during your talk that occasionally it takes a revolution. Dr. Ginzberg this morning suggested that it probably has to be evolutionary, but I do not think a lot of people will wait for that. Speak like a friendly psychiatrist and tell us what your opinion is.

ALFRED FREEDMAN: I am not advocating revolution. I think, if there is one thing that is true, every nation will follow its own course and its own destiny.

Their are several aspects. The demand for excellence of health care has been redefined from a misfortune to an injustice. In other words, an individual who may have shrugged his shoulders and said it is God's will, or that is the way it is, a few decades ago, now blames the government, blames the system, and demands greater care. This is what I would gather from Dr. French's presentation. One would want to know what the factors are that, let us say, make the difference in various systems.

I think one has to work first from the population to make them aware of the possibilities. A massive health education of the population is necessary, as well as the education of all the individuals involved with the health system. In a sense, what I was trying to say in my talk was that those being trained should be trained in the system that you feel they should be working at. Maybe it would take, as you see in the American medical schools now, a different generation of students. Now, what they will be like after they graduate, we do not know. But if we can develop a system of education that trains them in situ, in the comprehensive clinics or village clinics, depending on the country, then I think they will continue working there. If we attach status and prestige and give them financial incentive to work in those places, then we may see it go on.

There is also the problem of the education of the profession. And there is the commitment on the part of the governments themselves to legislate new systems and to set those in motion. In other words, I am advocating a multi-modal approach.

FEFFER: Of course, the problem, as most of you know, is that the government and the medical establishment are so closely identified in most of these places that they are indistinguishable. So, you can train a new medical establishment, but then it is an evolutionary process.

FREEDMAN: Yes, well I think an important part is really the training of consumers and citizens. We have found this important in development of community programs. If the medical school opens up a storefront and says we, your benefactors, can come in here, then it never works. But, if we tell the community that they can set up the program and we will work with you, and provide what we know, and you set goals, then I think that has a chance.

NORMAN STERN: I want to just say that I appreciate Freedman's comment that what we have to do is to encourage the education of the masses of people. But we are talking about millions of people who do not have too much of an idea of what education is about. So, I suspect that we are going to need doctors in our world, but it seems that the common denominator of good health has always been food, and adequate nutrition is what we must address ourselves to.

I'm sorry to hear that we are not emphasizing that as a world health organization: the idea of increasing the people's education, how to take care of their food, how to grow more food, how to distribute the food better. Physicians seem to be concerned with the medical aspect of good health, but I think that we are going to be able to promote better health for the world's people if we teach them how to take care of their grain, how to store it, and how to keep rodents and rats out of it, and the insects from eating it.

RAMIRO DELGADO: I am from Tulane University. I want to ask Dr. Zukin, who very nicely defined the characteristics of the modern health establishment the following question. If the modern health establishment must be responsible, and the areas that really determine the characteristics of the establishment are the health planning, the managerial and administrative aspects, and the development of human resources, why is evaluation not one of the most important ones? If you do not evaluate what you are doing, you cannot consider that this is a very modern organization.

ZUKIN: Well, I was really not trying to give a very complete dissertation on health planning and all the components. I was looking at this, more or less, from the standpoint of management. That is, how does an organization function, and so on? What are the major components? I would agree that you would have to know where you are going. We did not talk about an information system. But, all of this is really part of it. I do not know whether that answers you correctly, or not.

DELGADO: I was concerned that evaluation was one of the parts.

ZUKIN: Of course this is part of it.

If I may, though, answer Mr. Stern, who just spoke, too. One of the problems in the modern health establishment has to do with what the goals are. How does the health establishment see its mission? What is its business? How does it see what it is really charged with doing?

One of the problems that we face is the fact that most health establishments are not in the business of providing health. They are in the business of providing medical care, taking care of sick people. This, I think, is one of the fundamental issues that really has to be faced. Slowly, there are changes in the direction, as we heard today, the posture of the World Bank and the various development banks all over the world in the last two or three years. There have been changes.

I was just at the African Development Bank earlier this week. Since 1973 the ADB is beginning to fund health programs which they have never done in the past. They are beginning to look upon health, not as a consumption item, but as the support of health services in the broadest sense, which is not in terms of medical care and not in terms of facilities. I think there is real hope. They, too, are very much concerned about how the establishment functions, and this whole emphasis upon management is beginning to be looked at as a more critical aspect, with the downgrading of medical care as the chief focus of the so-called health establishment.

FEFFER: Dr. Delgado, this whole problem of evaluation is a very sticky one. There are very few people who are in programs, in this room, who will submit in advance to an external evaluation. Self-evaluation is worthless. This is a subject that requires much more work on it. At the Council office, we get many queries about programs as in Niger, for example. How can we give help in evaluating the program? It is very difficult.

PER STENSLAND: I am from New York University. Obviously, what we heard this morning and this afternoon will have a profound effect on universities, and not just medical colleges, but colleges, for example, of nursing, and colleges of public health. I wonder if you could comment on what we now need to do to clarify the new role of the university.

Maybe I should be a little more personal and say that I have been a college professor long enough to ask what we are going to do about the education of the professor and the instructor. Here is a big and very touchy subject, indeed. Professors are probably very very unhappy about evaluation from the outside. Could Drs. Freedman and French please comment as college professors on what we are going to do about our colleagues and ourselves?

FEFFER: Before they do, I will take the chair's prerogative and say that probably the first step would be to abolish tenure. Then, they would improve in their teaching.

FREEDMAN: Well, that is enough to increase my pulse rate. I think what you have to define clearly, in the training of health personnel, are the instructional objectives. What are you training for? What are we educating them for? What do we hope to achieve, with the understanding that we will be judged by the outcome? In other words, the individuals we turn out, the nurses, the doctors, the social workers, the physician's assistants, the health workers will be judged by how they perform. We determine these objectives in terms of the knowledge, the technical knowledge, that they have to learn, and the psychomotor skills that they have to be proficient with, and then lastly the attitudes, an affirmative attitude toward the job concerned. We judge them in that way.

It seems to me that by defining the instructional objectives, it is not only helpful to the curriculum, but also it is helpful to the instructional staff, to the professors. They have an idea of what they are supposed to do with some external reality, instead of what I think we have now, essentially a rather precious and internal world, in the sense that we pleasure each other, the professor on the students. This may be most irrelevant to the future task.

That is why I quoted Hodgkin's study. In essence, he points out that the emphasis in medical school, for example, is usually on the obscure diseases, which get the big play. Letterer-Siwe Syndrome, which many of you have heard of, may get a whole hour, while something like enuresis or malnutrition gets skipped over. Most of the schools do not have courses in nutrition, or they do not have extensive ones.

So, such clear statements to the professors, I think,

would be helpful to educate them, as well as the students. Lastly, I think there is nothing like the interaction between professors and students to enhance that, and also professors and the community, so that you will get some input from the consumers.

DAVID FRENCH: The problem, in terms of what the professors do, is really related to what the university sees as its mission. That, in turn, is related to what is the mission of a university in society? Precisely, what is it there to do? Is it there to create knowledge in some sort of a vacuum, or does it have a societal responsibility in terms of meeting problems in a realistic sense of the word?

If the latter is true, then one can hardly have the university function without involvement of the community. So, we have to have a three-way relationship here. We have to have not only the students and the academicians relating, but also some sort of community involvement.

We see this now occurring in a number of universities. This occurs not only relative to the national scene, but also in terms of international responsibilities, as perceived by universities. So, I think that this perhaps gets at the base. We can start at that point and expand in many different ways. This is one of the problems that occurred and was a great source of difficulty in the student activism of recent times. It was relatively sterile in many ways because the activism did not involve that third component, namely, the world in which this product is supposed to take its place.

The whole meeting could really revolve around that, but I think this is really core to the issue.

KEYNOTE PANEL
Health Promotion in the Community

John H. Bryant, Chairman
Daniel Lindheim
Kathleen E. Toomey
Louis Ratinoff
Somboon Vachrotai

JOHN H. BRYANT

The panel and audience both are interested in finding ways to change our approach to offering health care to the underserved communities. Instead of the hospital-based, highly technical treatment centers that heretofore have been the basis of help offered, we want to consider an approach that would serve directly the members of the community to help them handle their most prevalent problems. Bridging this gap can be hazardous.

Substantial numbers of people in the communities we are concerned with in both less developed and more developed countries, are the very poor who are excluded from the social, economic and cultural structures of those communities. When we develop programs with the leadership of those communities, to bring new technologies, new resources and new social services to the people of those communities, we often inadvertently strengthen the very social structures that exclude the poor. It is difficult to move through those social and cultural structures to actually benefit the poor and deprived.

Having acknowledged the importance of the relationship between poverty and health, that one of the important ways of improving health is by ameliorating poverty, consider the problem of the people at the international agencies who are accustomed to thinking in terms of cost-effectiveness. Indeed, their jobs may depend on how effective they are in expressing their policies and programs in terms of cost-effectiveness. If they want to get at the problem of rural poverty, one of their goals must be to increase productivity, which requires that they connect with those farmers who are already efficient in their production, probably to the exclusion of the very poor who are less efficient. If, on the other hand, their goal is to lift

people out of poverty, they might focus their investment on those who are least efficient and least productive; their investment, therefore, would be less cost-effective.

In considering community participation, how often do we simply inform the community what we are going to do, calling that community participation? We ask them, for example, if they want our style of health center built in a location of our choice -- that is community participation.

Going beyond that approach to sharing making decisions or permitting the people of the community to make the decisions, it raises questions of sharing power with people who might use the power differently from the way we would wish them to use it. Community initiatives are unpredictable. Is it professionally acceptable and politically feasible to give decision-making power to communities?

Another point I would like to make has to do with primary care. Dr. Newell and others have described the importance of primary care systems. We would like to see primary care reach all people at the community level.

We like to think of designing a health care system that will reach everyone. We do that by using our resources wisely and carefully and pushing at the periphery of the health care system, hoping to reduce costs and improve efficiency so that the system reaches everyone. It is obvious that the resources available through the formal health system are not enough to accomplish this; we may reach 10 percent or 25 percent of the population, but the rest of the people would not be reached.

We must turn to the community and their resources if we are to reach the full community. It is inevitable, therefore, that most primary health care must be provided by village health workers, people of the village who are given on-the-job and/or short periods of training, and who take their places at the interface between the health care systems and the community.

But, are we willing, from a professional point of view, to relinquish that much control over the health care system, to give to the community the prerogatives of diagnosing and treating simple problems, to allow the community to control that part of the system? How they will use the opportunity is not entirely predictable, and in that unpredictability lies its creative potential.

Finally, I call attention to our goals. We have talked about interrelationships between health care and community development, of using health care as a way of fostering community development, or using community development as a way of fostering improved health. But, to what

extent do we actually think about, plan for and evaluate the impact of our health care effort on the broader aspects of community development? A way of sharpening the question is to go directly to the matter of evaluation of health care programs. It should be possible to include criteria for evaluation that have to do with individual, family and community development in addition to the more usual indicators that reflect health status, access, efficiency and quality of care. For example, the thesis that health care programs can contribute to community development by encouraging participation, decision making, innovation and resource generation, can be evaluated through the following questions: what proportion of the population is participating in organizing and providing services in this health care program? How many decisions are being made by community people? To what extent are community people committed to these programs in terms of their time, money and other resources?

These background remarks are intended to call attention to some of the issues that we may not see, as we consider promoting health in the community. Now we will proceed with our panel.

DANIEL LINDHEIM

It is being accepted more and more as conventional wisdom that the health of a population is essentially a function of the socioeconomic conditions under which that population lives; and that poverty is at the root of health problems in the developing world.

Most people in the developing world are poor, and most of these poor (with the exception of those in a few Latin American countries) live in rural areas. Consequently, among the most important interventions to improve the health of people in the developing world is to directly attack rural poverty.

In the minutes I have, I would like to touch on some of the current ideas of the World Bank on health and health policies, and then to discuss in somewhat greater detail some of the programs now being implemented to attack rural poverty and stimulate rural development.

The World Bank has recently declared its explicit interest in the health field with the release of its Health Sector Policy Paper. Generally, its findings--in agreement with those of several recent studies and of much of what has been said today--were: that improvements in health have been largely associated with economic progress, rather than with improvements in medical care; that despite substantial international differences in levels of health, relating to differences in economic levels, the variations within each nation, between rich and poor, are even more pronounced; and furthermore, that health conditions among the poor throughout the world are basically similar with the great majority of health problems being part of a core pattern of airborne, fecally-related, or malnutrition-related diseases. These health problems are closely associated with socioeconomic conditions and, in fact, may not be resolved without a major change in those conditions.

Within projects directed specifically at improving health, the major thrust should be to provide access to safe drinking water, sanitary waste disposal, decent housing, and adequate nutrition. Without these, the more traditional and narrowly defined health care services will be largely ineffective. In the best circumstances, such health services might reduce the effects of disease, but they can do little to diminish the incidence of disease.

In many countries, health policies are inefficient and inequitable. Typically, a large proportion of public expenditures go to providing expensive manpower and facilities; these may possibly improve curative care for

a few, but they do nothing for the large majority of people who live in areas with severe environmental hazards to health. Furthermore, most resources are concentrated in urban areas, while most health needs are found in rural areas.

To increase the effectiveness of those resources allocated to health care, and to ensure more equitable access to care, there is a need to focus on technology which is accessible to most of the population and easily replicable health services. These services should improve environmental and public health, nutrition, and basic personal health care. This is not an argument against the need for curative services (healthy environment is not going to appear overnight), but rather for a more rational balance between measures which treat disease and measures which attempt to control its incidence.

As outlined in the Health Policy Paper, the Bank has decided not to become actively involved in direct lending for basic health service projects; rather, it will attempt to make more explicit the health consequences of projects which it supports, and to increase opportunities for improving health within present patterns of lending.

Essentially, the Bank health role will be to increase its present activities in three areas:

(1) analyzing the various sectoral (and multi-sectoral) projects in its lending program to minimize adverse side effects and to increase awareness of health concerns on the part of both Bank and country development economists;

(2) increasing the number of projects with health components--including those with vector control programs in irrigation, drainage, and land settlement projects; those with basic infrastructure investments for water supply and sanitary disposal; those for primary care health facilities in both urban and rural development projects; and those which provide nutrition interventions, through creating changes in food production and pricing policies, as well as through supplementation programs; and

(3) trying to develop and test selected elements of a reformed health promotion system within selected urban and rural development projects.

This should not detract from the basic premise that ill health is closely related to poverty and that efforts to attack poverty itself, rather than only some of its manifestations, may be the most effective of all health interventions. The WHO defines health as complete

physical, mental and social well-being, and not just the absence of disease. It is important to retain this broader perspective. For many health professionals, however, this definition has had little operational significance. Most of what contributes to good health is outside the "legitimacy" of the health professions, such as changing the basic socioeconomic conditions under which most people live, as well as the physical environment in which they live. The freedom of action generally allowed health professionals has unfortunately been restricted to the traditionally defined health sector.

What is interesting about the World Bank's increasing interest in health is that the Bank, by being involved in so many aspects of the total environment, is less troubled by this legitimacy issue, and perhaps has an important role as a health agency (health defined in the broad sense).

Conventional development strategies, however, have had little effect on the health of people living in rural areas. By conventional strategy, I mean that set of policies and programs usually formulated by well-trained economists focused on the growth objective, without regard to the distribution of benefits. The argument used to be that if growth were achieved, distribution would take care of itself. In fact, however, most development policies in recent decades have tended to concentrate income rather than to redistribute it, and in many cases the poor have become even worse off; and here little benefit to the health of these populations can be claimed. The Bank is therefore giving increased emphasis to development policies which directly attack the question of poverty. The old wisdom was "trickle down," but programs must be designed to directly affect the conditions of the poor--and not wait for the "trickles."

It is in this context that the World Bank has recently reformulated its strategy for both urban and rural development and is beginning project work directly attacking the problems of the poor. For the rural poor these efforts focus on increasing the productivity of, and removing the constraints on, the poor by providing access to agricultural inputs, credit, markets, and relevant research and technology for small farmers, as well as water supply and health care and education services. In addition, emphasis is placed on trying to alter price policies for basic agricultural goods which directly affect rural incomes.

This is, of course, not an easy strategy to pursue,

and certainly not one that is effective without a strong commitment to rural development policies on the part of government itself. In many countries current policies and institutional structures are so far from favorable to rural development that a policy shift could only follow a major political change. This is a key problem in situations demanding extensive land reform; it applies even more where the government itself is dominated by special interests unsympathetic to the objective of rural development. Even national-level decisions for development and assistance in rural areas will face problems in that the socioeconomic system operating in these rural areas is often hostile to the objectives of rural development, and serves to reinforce the patterns of such poverty. Thus, even well-conceived projects may be frustrated by host-country or local-level opposition.

The Bank is financing a major rural development effort in Mexico which I would like to discuss to illustrate several aspects of recent Bank strategy. Before doing so, however, I want to emphasize that the Bank makes no claim to having all of the correct answers, and the Bank itself is in the process of feeling its way through this maze of very complex problems. This said, let me mention a few things about Mexico. Modern rural development in Mexico dates to the early part of the century. It began with the redistribution of land rights, but, until the mid-thirties, little support was given to this redistribution in the form of credit and basic agricultural input needs. The governments of the following three decades, however, pursued a strategy concentrating on the industrialization and the development of large-scale farming under irrigation. This policy resulted in one of the highest rates of sustained growth in agricultural production in Latin America in the last quarter century. Nonetheless, the poorer segments of the rural population were excluded from this growth, especially in the rain-fed agricultural areas of the country.

In an attempt to change this situation, the government has organized a major nationwide program called PIDER (Program for Investments in Rural Development). Acting within the executive offices of the President, PIDER was created to initiate, coordinate, and increase the activities of government agencies in rural areas. A large number of the poorest areas in the country were selected and development plans were made for each of these areas, called micro-regions. The selection criteria basically required that the regions be poor, yet

have production potential. The micro-region plans have been designed to address the particular development bottlenecks of each reg . Some 75 micro-region programs are now in the implementation stage. There will be approximately five million beneficiaries among the rural poor when all 100 of the projected micro-region programs are underway. The basic strategy is to increase and concentrate the investments and services of existing agencies within the selected micro-regions, to decentralize the planning and execution to state and local levels, and to encourage village level participation in the planning and execution process.

The major part of the project is composed of directly productive investments going for the development of livestock and irrigation and for associated credit. To support these investments the program provides for the development of feeder roads, electrification, and--of special importance--for the organization and training of the poor farmers. Investment is also provided for water supply and for health and education services and facilities.

PIDER is different from other rural development programs in essentially three ways: First, PIDER is directed to areas which are among the country's most economically depressed; it is an attempt to redistribute income and productive capacity to communities bypassed by other programs. Second, coordination in planning and implementation is possible in that the PIDER office has budgetary control over all program funds--normally each agency is independently funded and operates according to its own assessment of priorities. Third, PIDER is an attempt to decentralize planning and program execution and to provide for greater involvement of the beneficiaries, in the planning process. Fourth, wherever possible, the project beneficiaries offer their labor and materials from the region as contributions to the specific investment projects.

The program also has a specific rural health component. Basically this consists of the renovation, construction and equipment of rural health posts, to expand the network of rural health facilities in accord with the new National Health Plan. This presents major shifts in the sector policy, particularly for rural areas, and emphasizes the promotion of community participation in health care with the organization of local health committees and the training of traditional midwives and local volunteers.

As part of the project, the Bank is financing pilot

programs in three micro-regions to explore alternatives to delivering, and having people receive relevant and cost-effective health services, including nutrition, health education, water supply and sanitation. The project emphasizes community participation in health activities, preparation of community health workers, in-service training for other staff, and a research and evaluation component.

Before ending, there are two points I want to touch on: first, the issue of community participation in such rural development programs; and second, the issue of possible conflicts between social and development goals.

Among the observations made as part of the supervision and evaluation process of the PIDER project in Mexico was that, while the program gave considerable attention to the relationship between rich and poor regions, insufficient attention was given to intra-village distribution issues. In most of the villages targeted by the program, small groups tend to exert strong internal influences (for example through money lending, land control and the like). This has direct implications for the outcome of "local participation" and for the distribution of the benefits of productive investments.

PIDER investments are often the first substantive contacts villages have had with government services and investments. Most of these villages are dominated by small power cliques, so that when government or PIDER officials arrive in the village and ask "the people" what they need, those who speak up are precisely those most in control. As such, the recommendations made by the "village" will generally reflect the views of these cliques rather than the village as a whole.

The initial report of the PIDER evaluation group argues against "local participation" at the initial stages of intervention--not because it opposes local participation--but rather because it fears that what is called "local participation" will in fact represent only the views of small and relatively affluent groups within the villages. It recommends avoiding "local participation" at first, except where the village is actually collectively run or until the Agrarian Reform Agency has been able to resolve the clique problems in the village. Until the dominant power groups are dismantled, they argue, local participation cannot become meaningful. Meanwhile, they recommend placing priority on investments which tend to have more equal benefit distributions such as drinking water, health clinics, schools, electrification,

extension and land-reform services.

A further issue is that, regardless of whether the cliques themselves benefit from project investments, such projects can tend to increase inequalities in the villages. Except in collective situations, the benefits from projects are limited to the groups directly involved in projects, rather than reaching the village as a whole. Productive investments such as irrigation or cattle units thus selectively benefit certain groups within the village.

I place special emphasis on this because, whereas I argued before that most macro-development strategies neglect the poor, even programs directed at the rural poor may not reach most of them unless their communities are effectively and independently organized. This is not an argument against participation, rather it argues for the necessity of real organization.

The PIDER program has both social and development goals: social, because the target groups are those groups most marginated from national development efforts; and development, because the project is based on the assumption that the people of these micro-regions have productive potential and will eventually be able to make a significant contribution to the national economy.

But there are real trade-offs between these rural development strategies and the need for short-run production increases. The rural poor tend to control very little of the most productive land. They tend to use the most inefficient methods for cultivation, and they constitute a large number of small-scale farmers which are therefore hard to service with inputs, technical assistance, and so on. The Bank argues that both social and growth goals can be pursued simultaneously by developing the production potential of these poorer groups. However, under the pressure of short term production needs to meet the food crisis, such development efforts to attack rural poverty may tend to be postponed in favor of investments in the high-productivity farmers who control much of the cultivated land.

Thus, in both the spheres of rural economic development and health development, the issue of governmental commitment to redistribution and equity is crucial; without that commitment, it is doubtful that there will be much improvement in the health of rural populations in the developing world.

The views expressed in this paper are those of the author and do not necessarily represent the views of the World Bank.

KATHLEEN E. TOOMEY

The interface between Western and non-Western healing practices will become increasingly important as Western medicine is made available to areas where indigenous therapy has historically predominated. It is important to the discussion of health promotion in the community to consider the case where Western medicine has had little influence in the development of a health care system.

As a Fulbright Scholar (1973-1974), I had the opportunity to study indigenous healing practices in jungle and mountain regions of Peru where Western medicine has had only limited influence. The focus of my jungle study was an agricultural hamlet, a two-hour journey from the town of Pucallpa on the Ucayali River of the Amazon basin. The population of roughly 300 people was composed largely of transitional Quechua Indians and Campa and Shipivo tribesmen, providing an amalgam of ideas and cultural heritages. Nominal Catholicism was the predominant faith, although Protestant missionaries had been active in the area.

Illiteracy was high and health generally poor. Chronic malnutrition was aggravated by local notions of what constituted a "good diet." Fish, for example, was infrequently served as it was "full of water" and therefore not as nourishing as cassava or plantains.

Primarily subsistence slash and burn farmers, villagers would occasionally sell surplus crops to the Pucallpa market wholesalers for a small fee, usually the only source of income. Many of the younger men had left the village in search of work with newly established oil and lumber companies in the region, often leaving a wife and several children to manage on their own.

The Hospital Amazónico, staffed by European nurses and physicians, had been operating in the area since 1960. Although only an hour away by launch, it was viewed by most villagers as the place to "go to die," and was utilized only as a last resort. Misconceptions and fears about the hospital were sometimes reinforced by staff members whose ability to communicate in Spanish was far from adequate.

Don Genaro, a Spanish-speaking Quechua "curandero," or indigenous healer, was widely known in the area for his successful cures. After much persuasion, and with the encouragement of villagers, he accepted me as his "apprentice healer," just as he had apprenticed to learn the healing art with a Campa [illegible] an over 30 years before. Doña Rosa, his wife, later told me that a white

butterfly had entered the hut before our first meeting, flying around and around in circles. This was a good omen, foretelling my arrival to the village and perhaps setting the tone for the very intimate friendship and trust that developed between myself and the villagers.

Living in the home of the now retired Campa "maestro" and other village families, I remained in the jungle for four months while continuing my formal apprenticeship. This rather unique situation allowed me to explore first-hand the dynamics of an indigenous health care system.

In examining the major aspects of healing in this area, these key ideas should be kept in mind:

1. The concept of a multi-focal disease causality and the intimate relationship of disease causality to treatment.
2. The eclectic nature of treatment, encompassing elements of the natural and supernatural.
3. The healer/patient relationship and its importance to successful therapy.

Simple illnesses are "God-given" and are usually of short duration. Runny noses or intestinal worms, for example, are ubiquitous but considered "natural" and thus not dangerous.

A more persistent disease could originate supernaturally. "Mal aires" or, literally, bad airs, enter the body as a chill, especially if one is not adequately covered when walking at night. "Susto" is the loss of the soul through a severe fright, and manifests itself as restlessness, insomnia, diarrhea, anxiety. The soul must be recaptured and returned to the body to restore health. "Susto" is more likely to occur when abruptly awakened or in childhood, times of special vulnerability. "Pulsario," especially seen in young women, is a sign of "pain in the heart" from an unhappy incident or encounter. A throbbing can be felt near the navel, with a hardness about the abdomen and general restlessness and anxiety.

The jungle itself teems with fearsome and sometimes harmful spirits, like the "Tunchis," spirits of the dead. The "Chullachaki," a mythological figure with a peg leg, wanders through the jungle in search of an unsuspecting victim to lure to his death, disguising itself as a relative or friend.

Certainly the most fascinating and serious cause of illness is witchcraft. Magic and witchcraft are a fundamental part of the world view of these people, and function as an explanatory system for events affecting people and the environment. Just as illness within our medical system is explained through scientifically proven principles, so

illness and even death are analogously explained by witchcraft or magic.

Witchcraft is directed through a human agent, the "Brujo," or witch, who, in contrast to the curandero, is paid large sums of money to inflict harm, work love magic, or in some way manipulate the lives of others. "Hechizaría" (bewitchment) and "Daño" (damage) may present as any physical infirmity: weakness, weight loss, blindness, or pain, but always result from the malice of another, who because of envy or jealousy wishes to induce suffering. Such a premium is placed on good health that an envious person may resort to witchcraft to deprive another of this unusual state.

Treatment of each type of illness will be intimately related to the cause of disease. It is essential to the healing process to identify and understand the source of an illness, whether natural or supernatural, before treatment can be effective. The artificial dichotomy has never evolved separating "mental" illness from strictly "somatic" illness, and, in fact, the psychotherapeutic aspect of the healing process is of primary concern.

Diseases of "natural" or "God-given" origin are treated with herbal medication well known to people in the community. Gathered in the jungle or cultivated in special medicinal gardens, specific plants are utilized to prevent infection, to facilitate wound healing and prevent scarring, to induce abortion, and as contraception. Pharmaceutical products are sold over the counter at the Pucallpa drug stores, but are quite expensive for the meager incomes of most villagers.

Should herbal treatment fail to bring a response after a period of time, an illness of a more serious nature is suggested. A specialist is consulted, the curandero, whose diagnosis and treatment traverse both the natural and supernatural worlds and embrace Christian and pre-European traditions.

Because an unequivocal diagnosis is crucial to effective treatment, the healer may employ a hallucinogenic vine called "Ayahuasca." The "vine of the souls," identified as Banisteriopsis caapi,[1] is boiled to form the "Purga," or purge, the healer's chief diagnostic tool. Through the drug, the healer is transported into the mystical world of the supernatural so that he may identify the source of his patient's illness and thus determine the proper treatment.

The ayahuasca has a "mother spirit" or "Genio" directing its action, who appears during the hallucinogenic sessions to "teach" the curandero and guide him in the

proper treatment. As an apprentice, I was also asked to participate in this ceremony, for the genio must accept the novice healer before she will reveal the secrets of the art of healing. Likewise, the patient will be enlightened by the genio as he drinks the purga, so that in understanding his illness, he will be able to work more effectively with the healer. Together the healer and patient see figures from the patient's life-friends, acquaintances, even relatives, whose appearance may implicate them as the responsible agent.

The purga must be taken during the special ceremony conducted at the healer's home once a week. The patients gather in late evening, seating themselves in a circle around the dirt floor of the hut. An air of expectation and a tremendous faith bond the patients in their communal healing effort. A ceremonial tobacco pipe is circulated in preparation for the coming of the genio. This is followed by the "Porhongo," a calabash cup containing the ayahuasca to be drunk by each patient in turn. As the patients begin to fall under the effects of the drug, the healer chants soothing "Ikarus," special ceremonial songs to guide the patients in their visions. The drug may induce violent diarrhea and vomiting, an accepted consequence, in response to which patients will merely step temporarily outside the hut.

The healer is careful to move from person to person during the ceremony, giving individual attention, questioning each patient, and trying to guide or interpret the patient's visions. After an interval of several hours, the ritual is repeated to intensify the response, until finally the patients fall asleep on the floor.

During consultations held on weekday afternoons, the curandero effects treatment indicated by the ayahuasca diagnosis and treats those illnesses that do not require divination. In contrast to the evening ceremony, the weekday "Consultorio" is an informal, individualized session. Using the pulse as an indication of the patient's condition, the curandero may ritually cleanse cardinal points--head, chest, abdomen, and extremities--with tobacco smoke, annointing afflicted areas with scented water or camphor. Particularly sore areas may be read as the intrusion of a spirit into the body through witchcraft. The healer will suck on the spot in an attempt to draw out the spirit, sometimes removing a "Chonta" or thorn from his mouth as the embodiment of the evil presence.

The healing ceremonies draw strongly upon tribal and 16th century European traditions. The tribal concept of hallucinogenic divination is combined in the use of

ayahuasca with the classic Spanish doctrine of a purge or cleansing of the body.[2] The syncretism between Catholicism and traditional beliefs is striking. The ikarus songs combine invocations to the jungle spirits with appeals to Christ and the Virgin. Votive images of Catholic saints, particularly that of St. Cyprian, the patron saint of healing, are frequently employed during the ceremonies. Catholic ritual is mirrored in the use of the sign of the cross and the sprinkling of water over the patient's body.

Above all, however, the relationship between patient and healer deserves special attention. The success of the healing process depends in large measure on the implicit faith in the powers of the healer. Indeed, the healer will carefully screen prospective patients, turning aside those he feels he cannot effectively cure and thus preserving his credibility as a healer.

At the same time there is an emphasis on the cooperation of healer and patient. Taking into account the expectations on the part of the patient with regard to the generation and treatment of his illness, the healer may adapt his diagnosis to conform to the patient's conceptions. The healer perceives the illness in relation to the patient's total milieu, reading illness as a function of the intimacies and interactions among community members. This philosophy renders his therapy more effective than the treatment of an isolated series of symptoms.

The responsibility for successful healing is reciprocal: the patient is as much responsible for his own cure as is the healer. If the balance is upset by either party, therapy will be ineffective. The patient must follow a strict diet, avoiding salt, pork and lard, to pay homage to the mother spirit of the ayahuasca. If offended by negligence, the genio may give an incorrect diagnosis or cause the patient's condition to worsen. A menstruating woman must not approach the healer as she can offend the mother spirit, rendering the healer powerless. If the curandero overcharges any patient he has treated, the mother spirit may retaliate by incapacitating or even killing him.

Investigators disagree as to the efficacy and possible danger of encouraging non-Western healing techniques. Certainly, success or failure of a given therapeutic practice cannot be judged solely in comparison to Western practice, but must be viewed within the context of the specific non-Western disease etiology. My

experience tended to support the positive aspects of native psychotherapy, although the medicinal value of herbal therapy should not be overlooked and deserves further attention.

As more and more attempts are made to introduce Western medicine into areas predominated by indigenous healing, it will be likely that native healing practices will not disappear, nor am I convinced they should. Western medicine and indigenous medicine can be thought of as two parallel solutions to the universal problem of illness, yet a potential exists for a substantial interchange between the two systems. They are separate but not mutually exclusive therapies, one approaching illness from the supernatural, the other from a scientific perspective.

Any real change in the health status of a community, such as the one I observed, must come from within the community, not from outside. Technology and technicians must be accepted by the community as non-threatening to the mode of existence. Villagers were reticent about approaching me when I entered the village. However, once accepted by the healer, I was accepted by the village as a whole. Likewise, a possible link between Western diagnostic and preventive medicine and the community can actually be the native healer.

The healer commands great authority in the village and, indeed, has historically been the sole health care practitioner. The art of healing is not a profession but rather a sacred gift from God. To impose any medical system on the community that will attempt to subvert the healer's traditional authority will be threatening, not only to the healer but also to the great majority of the community who have faith in the healer's powers.

Perhaps it is not a question of public health as much as public and human relations. The key to the acceptance of Western medicine within these communities is cooperation. The healer has already demonstrated that he recognizes his limitations by referring patients to the hospital. If this practice can be encouraged without subversion of the healer's authority, Western medicine has a better chance for integration into the existing health care system of the community. Systematic education of the populace with regard to Western preventive and diagnostic techniques is crucial to their success in the community. The healer could be our most valuable resource in promoting this effort.

The following anecdote may illustrate my point more clearly. While living in the village, on occasion I

distributed vermifuge tablets and was concerned that perhaps the healer would take this as an affront to his power. I was very surprised when one day he himself approached me to obtain some medication for his grandson. Questioned on this point, he replied, "I do not deal with those kinds of illnesses. That is not what I treat."

Later, we discussed Western medicine, and Don Genaro questioned me curiously about our techniques, fascinated by the marvels we were able to accomplish. But then he asked me, "Can you cure susto?" and I quite honestly told him that we would have no notion of how to deal with it, for the realm of the supernatural is not accessible to Western therapy.

What the healer does within his system is as important to these people as what Western medicine has to offer them. Indigenous healing has already demonstrated its ability to successfully incorporate diverse concepts into its therapeutic practices. Just as the strength of the healer-patient bond is intensified by the cooperative character of their relationship, rather than by the healer's dominant role, so the aim of Western technicians introduced into these areas should not be to replace the curandero but to assume an equivalent position within the total health care system.

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LOUIS RATINOFF

First of all, I have to explain to you that I come from an institution which gave its first loan for public water to be administered by a community in 1961, and we have continued with this type of project.

In 1967, the Inter-American Development Bank began a new line of operations to provide funds for health delivery systems mainly in the rural areas. I am going to summarize very briefly the policy orientations in the Inter-American Development Bank, and then I will review some of the limitations that we have. Later, I will refer to the concrete projects that we were unable to finance, because of limitations, even though these were first-class projects from the point of view of community participation, as well as a good solution for the health problems of some areas in Mexico.

The Inter-American Development Bank emphasizes the importance of preventive medicine and the financing of rural health delivery systems. It supports integration of health delivery systems as part of economic and social development. The Bank also emphasizes the need for training of personnel and health education in the community.

The Bank is an institution with government representation on its board. There are certain criteria for program development that we require. First, there must be a government priority for the project. Second, the project we finance should be bankable, and therefore a well-developed project. Sometimes those projects which make sense at the community level are not bankable projects. We do provide some technical assistance, but that technical assistance is provided through channels that make it very difficult to reach the community level. We also have some limitations in terms of what we finance. We finance mainly the capital costs of the project. We do not finance the so-called local costs of the projects. Therefore, because of these limitations, we tend to finance what I would call the more conventional type of health projects.

The Bank operates in the Latin American area, and there are some limitations related to what is happening in the area. Latin America is an area or region that has what I would call semi-developed countries. These countries share the disadvantage of not being fully developed, and yet, because of some development, they lack assistance many lesser developed countries receive.

Latin America has many of the medical and health traditions of the developed countries, but frequently

they cannot provide effective health services for the people, using those models of the developed countries. Somehow, those modern standards in Latin American countries, supported, I would say, by the medical profession, mainly, are very difficult to use. If you want to extend those services to the rural areas, it becomes very difficult from the point of view of financing. So, there is the need in the area for new approaches, and certainly there is a tremendous challenge not only for institutions like the Inter-American Development Bank but also for people interested in health matters within these countries.

I am going to describe very briefly a project that I have just been evaluating. This project is one that the Inter-American Bank will obviously not be able to finance. It is a difficult project to finance even by the country itself. When this project began, it began in a non-bureaucratic environment. When I looked at the people involved in this project and how they began, it became quite obvious to me that such a project is very difficult to develop and even to conceive in a bureaucratic environment. This project was not conceived in the Ministry of Public Health or in any form of bureaucratic medicine in that country.

The project began as an intention of some people who wanted to do something, but they did not have resources. They could not exercise pressure on any authorities to get financing from the budget. They had to find out ways to do what they wanted to do without financial resources. They were forced to use what I would call expedient means to reach the same goals. In this way they developed a new way to provide health delivery for rural people in that country. Those expedient means, after six, seven or ten years, have become institutionalized. A lot has been learned from these experiences. A system of very direct communication with the people helped create a complex system to provide health services to the rural people.

How was it done? First of all, the clinics of the system were built by the peasants themselves. Second, although the standards in the clinics might not be considered of the highest quality, nevertheless, treatment was very effective considering the lack of resources. Another element was that there was more concern for the operating costs of the facilities rather than the cost of the initial investment. So, sometimes the unitary cost was rather high, but the running costs were low. For a conventional hospital financed by the Bank, I find that the unitary costs tend to be low initially, and sometimes the running costs later on can be rather high. This is

quite the opposite for this project.

Also, only two types of doctors were used in the project and only for short periods of time. These were doctors who had just received their degree and retired doctors. Incentives were used to attract those doctors to the rural areas. A new type of auxiliary personnel was developed. They were mainly trainees for a short period of time. The project got authorization from a lot of universities to provide degrees for nurses. Peasant girls were recruited for three years in-service training in rural and urban areas. At the end of the three years, these nurses were able to diagnose ten basic diseases and became very effective auxiliary personnel.

Since costs were held to reasonable levels, peasants could afford to pay insurance to finance the system. The cost for the peasant to participate in this insurance system was about 60 Mexican pesos per year, plus a very small fee for each consultation. This amounts to five or six dollars per year. The local community served as a control element in the program to hold down administrative costs.

It is difficult for me to describe in full detail all the elements of the system, but somehow it has been successful. There are now about 200 or 300 clinics in Mexico in very isolated rural areas. In many places it is the only medical assistance provided for the peasant, and it is financed by the peasant.

SOMBOON VACHROTAI

According to my assignment, I am so pleased to confine myself to what experience I have had in my own country, Thailand, which is also one of the developing countries, and may be in a different situation from the others.

On behalf of the Health Administrator, I would like to say that an attempt to develop the health promotion in a community in Thailand has been realized more than 20 years ago, but this dream never came true due to four main obstacles. The first one is due to the policy of the government. During the past, the government's policy was aimed at the specialized programs, which, of course, have resulted in significant achievement, and reflect the government's investment. They show a degree of success for the government's policy. We never have had a clear cut policy towards any health promotion in a community, so that it is impossible to implement any health promotion in a community in terms of its administration and management.

Second, it is the problem of the "Health Manpower Producers," that is the medical universities and schools, to produce appropriate health personnel to suit the country's needs. Most of the training program is following the Western standard of the developed world, and this causes a lot of problems of maldistribution and unwillingness of the health personnel to serve in a community, especially in the rural areas, where more than 85 percent of the total population live.

Third, there are inadequate numbers of health personnel, as well as of health infrastructures available that result in poor coverage of health services.

Last, there are problems due to the health consumers, who are mostly living in the rural areas. This rural population is facing what is called a vicious cycle, comprised of ill health, poverty and ignorance. Their felt need is only medical care which they are seeking from either the Western medicine or traditional medicine, from both public and private sectors.

During 1970, the Ministry of Public Health conducted a survey throughout the country with the assistance of the World Health Organization, the Population Center of the Chulalongkorn University in Bangkok, and the School of Public Health of the Mahidol University in Bangkok, to find out, especially in the rural areas, where the people go when they get sick.

The outcome is that 51 percent of them go to the drugstore. Twenty-two percent of them go to the private

hospitals and private clinics. About 15 percent of them go to the government hospital and rural health center. About four percent go to the quacks, or, as some are called, the injectionists. About four percent go to see the traditional healers. The rest never get any kind of treatment.

Based on these findings and the problems which I have mentioned, it is realized by the Thai health planners that they have to try to overcome the problem by trying to formulate a health promotion program in the community that is based on the Public Health Administration's experience in Thailand. The Thai planner thinks that there are three main areas for involvement. First are the objectives. We have to set up a definite objective. What are we going to do about health promotion in the community? I will say that it is not quite easy to do that, because we have not only to set up the objectives, but we have to plan as well for the evaluation of that objective.

The second area is the resources. All resources should be reviewed. What should be the existing resources for the public sector or the government sector? Are the resources enough to implement the objectives or not? What are the indigenous resources of the so-called community participation?

The third area is the most difficult, because we have the objectives, and we already have the review of our resources. In between the resources and the objectives, there is the method. How to move the resources toward the objective depends largely on the methodology of what we are going to plan.

The method should be based on what I like to call the integrated health service. According to the World Health Organization expert committee on Public Health Administration, it defines the terms of the integrated health service as necessary health protection given in an area under one single administration, or maybe several organizations provided that the adequate coordination could be obtained.

Of course, what I have observed is not only for the developing countries, but also for the highly developed countries. The term coordination exists only in the way people are talking, or exists only on paper. So, it is very difficult to get real coordination in any activity. Therefore, it has been decided by the Ministry that it should be based on a single administration, and the areas that would be included in the integrated health services would be divided into three main areas.

First, I am concerned with the administration. How can we have service under one roof? The second area is the personnel development. I myself would like to admit that the success of the plan or project mainly depends on the personnel. It does not depend on the money or the supplies. Even if the country has a lot of money and a lot of supplies, but they do not have the proper personnel, I would guarantee that the program or project might be a failure. So, the personnel development towards the private sector or the public sector or the volunteer sector is highly desirable. The third area is the service. How can we obtain a proper methodology for integrated services?

I would like to end by saying that the details of this approach will be presented tomorrow in the Panel on Health Problems in Developing Countries, in which I will point to some of the innovative approaches that have been carried out in Thailand.

INQUIRY AND COMMENTARY

GERTRUDE ISAACS: I would like to ask one question that I did not dare address until I heard the presentations of this panel. We have heard a great deal about the indigenous worker and the paraprofessional, and I would really like to ask, when would the medical professional be ready to join the other health professionals in their efforts to provide health services in the total country? I still feel that many of us are being excluded, and I do not know how we can work as a team until we unite our efforts.

JOHN BRYANT: It sounds to me as though you were telling us, not asking us, which is all right. Are you asking for volunteers? Are there any other comments or questions?

WILLIAM OLDHAM: I would like to ask one question of the economists, of both banks. What type of loans or what type of grant-in-aid do you give? Do either of you pick up recurring costs on a long-term basis, or is it seed money that starts projects, or capital projects investments as such? Do you pick up personnel costs on a long-term recurring basis?

DANIEL LINDHEIM: No. Basically, what the World Bank does fund, in any case, is basically the capital costs. It does fund recurring costs for the time of the project. If there is a period of three or four years of disbursement for the project, it might include recurring costs. If it was a pilot program of some sort, it funds the recurring costs for those four years, but it would not be for recurring costs over time.

MALCOLM MERRILL: I cannot resist trying to respond a little to the question about when are the physicians going to come aboard. I think we have seen some very encouraging developments in the last decade or so, where more and more physicians are coming aboard and becoming really members of health teams in the provision of health services.

I recently had the experience of looking again at some of the developments in the Los Angeles County Department of Health Services. There the development of the team approach to provision of health services is taking place. The concept is developing that the leader of the team does not necessarily have to be a physician. It can be a nurse. It can be a social worker. It can be a nutritionist or any member of the team. I think we are going to see a very interesting experiment there and elsewhere, where teams are really getting together to try to work out the problems.

I think we are seeing within our country a very marked movement in the direction of physicians delegating more and more of the responsibility for primary health care to other members of the team. We are seeing the whole development of the Medex concept, the physician assistant and the nurse practitioner. This is occurring in many of the developing countries of the world. I think the next decade is going to see almost a revolution in this regard, not only in this country but throughout the developing world.

BRYANT: It is nice to see a man of your years an optimist. I would like to suggest a correction. You implied that it is moving fairly well here, and it seems to be beginning to move in some of the developing countries. I am sure that you would acknowledge, for example, that the use of physician's assistants is now 60 years old in Africa, and that we have learned a great deal from the use of auxiliaries in other countries. We are some of the latecomers. It will be interesting to

observe, as kind of a cycle, those less developed countries which, perhaps from using some of our so-called international standards, have been reluctant to use auxiliaries for medical care. As North America begins to change, it may at least change to some extent the acceptability of that in some countries.

LEE STAUFFER: Dr. Lindheim, I sense in some of your comments in the policy area that growth was a policy that was attempting to be achieved by the World Bank. I personally believe that growth is not only not an unmixed blessing, but, in fact, is the doom of us all, ultimately. We certainly cannot look to other countries to achieve growth if we measure it in the sense of energy consumption and consumer goods. I think that we have to look ahead to reduce growth as a policy. I just wanted to know or I would like some indication of how this is being dealt with in terms of aid, and what the official policies are in regard to growth.

LINDHEIM: I did not make myself clear. The first thing is that most traditional development policies have focused on growth. Such policies, because they focused on growth, and expected the benefits of that growth to be redistributed, never really focused on distribution policies. As a matter of fact, most growth policies in the last few decades have not helped most of the people. Growth policies, per se, have not been beneficial to most of the people in most countries.

Second, there are certain absolute shortages, so that growth of production among peasants and among small producers is certainly something that is very necessary. To the extent that you can produce or increase the production of those things which you really need, then growth, per se, is not bad. It is only when the side-effects of that growth become really noxious that you want to stop focusing on that kind of growth policy.

My point in all of this, and I think what the Bank is particularly concerned with, is what are the distributions of that growth? Increasingly, policy is beginning to focus and to really delimit what the distributions of growth policies are, and if they are not in accord with what the goals are, then maybe we should not pursue them.

ROBERT THOMSON: I'm from the Canadian University Service Overseas. I noticed this morning and this afternoon the general stress in most of the presentations has been on community health and the fact that health services have to be community based, multidisciplinary, and in the end run self-reliant. I think that most of us would agree that health by the people is one of the things that we should be aiming at. Would it be possible tomorrow to have another workshop set up which would discuss the experiences of the large numbers of people here who have actual in-the-field experience, experiences such as Ms. Toomey has had, experiences which no doubt many of the non-governmental organizations and the voluntary associations here have had? This panel would be for sharing the experiences for those of us who are working in organizations that do not have to worry about bilateral constraints or can actually get into villages.

I would find this personally a very useful type of workshop, particularly in that many of the people here are beginning to talk about paramedical professions and paramedical training. We are verging on talking about health by the people, not for the people, but by the people. I would be very much interested in seeing if the conference organizers could perhaps set aside another room and another workshop, whereby those who are interested in this area could sit down and share some experiences.

BRYANT: Well, you will have to put your heads together outside on that.

C.W.L. JEAVES: I am also from Canada. I would like to congratulate Ms. Toomey on her brilliant expose and the tremendous insight she gave us into the job that she did. I think there was a great message behind her paper.

I would like to ask the panel a question about medical emigration from developing countries, which is such an awful problem. Now I think Thailand is one of the countries in Southeast Asia that has this problem less than most of the other neighboring countries. It really is heartbreaking when people emigrate who have been trained to do the job in their country. We have experience in an African country, mentioned in your book, Dr. Bryant, where only ten percent of the first 100 medical graduates are really working on the needs of the country, and the other 90 are doing different

things. What is your attitude toward medical emigration? What can we do about this to stop it?

SOMBOON: I am so pleased that you touched this point. It is of some difficulty in the developing countries. We have about 6,000 doctors throughout the country and more than 1,000 working in Bangkok, which has about eight percent of the total population of the country. We have 2,000 doctors working in the rest of the country, which represents about 92 percent of the population. There are about 2,000 working in the United States.

The government of Thailand has not decided to stop this, but they have tried to find another way to enforce this. So, the policy of the government in the past four years is that all of the graduate doctors must work in the government service for at least two years, and then they can leave the service to go anywhere else as they like.

We have the first batch and the second batch of the doctors now. It is about 400 per year that graduate and are now enrolled in the services of the country. For those who are working in the United States, I do not know if they plan to go back or not. We need to study what they are planning, but this study is still under way by the Ministry of Health.

BRYANT: I have some data that might be of interest to you. The United States, the existing system, has the benefit of a net gain of foreign physicians that is between 4,000 and 5,000 per year. If you make a conservative estimate of the cost of medical education in those countries as being around $50,000 per graduate, that means that our net gain is in the range of $200 million to $300 million per year in terms of their educational cost. As you know, under the current Health Manpower Bill, there is some discussion as to whether there should be a cutting off of that flow, and the primary mechanism would be requiring a licensure to practice that would go beyond the ECFMG. I would like to ask Carl Taylor if he would comment for us on the steps that the National Council for International Health is taking in this regard.

CARL TAYLOR: The wheels of progress grind very slowly on a matter as complex as the FMG problem. The National Council of International Health set this as one of its major objectives as a task force activity right from

the beginning. This has culminated in an activity which some of you at least know about. A conference was held last spring jointly sponsored by NCIH with the CCME, the Coordinating Council on Medical Education in the United States. This brought together a range of decision makers here in Washington to look at where we can go in practical terms. We had people representing some of the action agencies from the government, including Immigration, Labor and the Department of Health, Education and Welfare. There was considerable interest from Congress.

The recommendations of this conference ended by dealing with four areas. Three of them are to be implemented by CCME directly, and the fourth is to be implemented by NCIH. The actions that are being taken by CCME to implement include things such as changes in the immigration policies, which have been much discussed, but are still very hard to do anything about. But, at least they are being looked at again.

More importantly, they include a look at the range of activities that relate to the opportunities for doctors from overseas, particularly in the residency programs. I think that is probably where we are going to see a major change in the pull factors. Within the next year, there is at least the hope that we are going to begin to see some major changes in the pull factors.

The NCIH was given responsibility in the area of push factors, FMG migration. We will have as part of our report a set of recommendations and studies that will focus on helping the educational process, which originally led to the unfortunate pattern that we now have. We hope to do it in a way that gets at the real solutions. This is a problem that many people in this country have become very acutely concerned with. It is a problem that has now reached decision-making levels. I think that we are at the point where we are beginning to get some changes.

RIDGE APPLEGATE: I am working in a highly urbanized area across from Manhattan. The problem in regard to this doctor drain is to have an adequate health care system in this country that distributes our own physicians so that all of our people can have health care. Until we are able to do this, we must rely upon the foreign trained physician. My service area has not had an American trained physician come into practice in the past five years. We have American born physicians who go to Italy and come back, but we are totally dependent

upon foreign trained physicians for our medical care. New Jersey is a state that has not had a medical school for a number of years. Although it is now getting one going, something on the order of 80 percent of our emergency room care is provided by foreign trained physicians. So, I would recommend that you try to look at some of the inadequacies of our own system in order to cover our needs and not force the lucrative financial situations to draw the foreign physicians into our country.

I would also like to ask a question concerning the programs that have been presented here today. The focus is on rural health programs, what the problem is and what they are going to do. In Latin America, something like 80 percent of the population lives within 200 miles of the ocean. The majority of your health census problems occur in urban areas. I am less than a mile from Manhattan and have trouble getting physicians to practice in our programs from Columbia Presbyterian Medical School. The urban centers around Latin America have the same problem. What is it about cities that keeps people from coming in there to try programs? I would like to have each of you from the two banking institutions comment on it. I know personally of populations of over 200,000 and 300,000 people in Latin American cities that have basically no access to medical care. Small programs could be very effective there.

LINDHEIM: Two points. One, as an urban planner, it was very hard for me to start focusing on rural areas. Most of my experience before joining the Bank was in Latin America, and it is very true that in Latin America most of the people who do not have services are probably in urban areas, because most of the poor in Latin America are probably in urban areas. This is not true anywhere else in the world. This is just one distinguishing point.

The second thing is that the Bank, paralleling its development in rural areas, is trying to focus efforts on urban development. It is trying to provide upgrading services to squatter areas. It is trying to institutionalize squatter areas to provide basic water, sewage, light, basic roads, and also trying to provide jobs in squatter areas, as opposed to tearing them down, which was the current vogue a few years ago. It is trying to provide basic medical care services, basic primary care services to most of these squatter areas.

It is very true that there are no physicians in those areas. It is very true that most of the physicians have no desire to work in the squatter areas. There is really nothing that my institution can do about that.

What we are trying to do in the case of Mexico City is to change certain premises of the national health system in Mexico, so that there will be physicians who will provide services in some of the urban slum areas. But this is very hard to do. Until there is a commitment from that country to do so, even if we were really good and benevolent institutions, which I will not necessarily make the case for, there is really very little that we or the IBD can do to change that. That government must have the commitment to provide services to those urban areas.

LOUIS RATINOFF: First of all, 50 percent of the population of Latin America still lives in the urban areas. Second, the so-called rural health delivery system is not necessarily located in rural areas. There are ways to extend the existing system and ideas in the urban areas into smaller types of cities. So, the countries can be prepared in the future for the tremendous population growth, so that they can allocate more people in smaller towns to provide enough modern services.

Also, at least from the point of view of IDB, we have classified the Latin American countries according to their health needs, and we provide in some countries loans for urban areas, when that is the need of the country. Most of the countries in which we are interested to provide health loans are mainly rural countries, which need most of our funds.

JONNA-LYNN KNAUER: After the comments this afternoon, I cannot resist saying something. I am a nurse practitioner and it is very difficult to find places of employment for nurse practitioners in the United States, depending on where you are from. I wonder if this might not be a very serious consideration for all of us in working together, team work, and team approach for increased utilization of nurses in extended roles.

I have also worked in Africa, and the opportunity of incorporating the medical auxiliary into discussions of health care is very often forgotten. Maybe the doctor and nurse might get together, but all too often we forget the medical auxiliary who is out there giving most of the care.

BRYANT: Thank you for bringing a nurse practitioner into our midst.

An important challenge ahead for all of us who are concerned about extending health care to communities, has to do with how we can break from the traditional point of view that has the entire health care delivery system under the control of central authority, including planning and funding. We need to consider alternatives by which communities may have substantial responsibility for planning, decision making and funding. At the same time, we need to be aware of structures within the community that may be oppressive and exclusionary, and consider how these effects might be minimized. This is part of our frontier. I would hope that institutions, funding agencies and individuals turn their initiatives in this direction.

KEYNOTE ADDRESS

On the Responsibility for International Health Cooperation

Dmitri Venediktov

Allow me, first, to express my gratitude for your invitation to address this Conference of the National Council for International Health. The very fact that such a Conference is convening, as well as its participants, is profoundly symbolic. Though even the World Health Organization has not yet given the definition of "national health" and "international health," all of us realize that international cooperation in protecting and promoting the health of the population in different countries has today become an important area of activity for national agencies, as well as a sphere of international legislative and cooperative efforts aiming at resolving present and future international and global medico-social problems. Although the need for international cooperation in the field of medicine is well known and generally acknowledged, one cannot fully appreciate its significance without looking into the past.

Medicine was indeed international since ancient times, when sparks of knowledge about Man and his diseases seemed a mysterious, divine gift that was passed on from one civilization to another. Down through the ages, various contacts and ties developed between physicians and scientists of various nations, along with the accumulation of medical knowledge, the humanistic and selfless nature of medical practice, and realization of the international danger of epidemic and other mass diseases.

The longest was the first period of sporadic contacts between individuals of medical professions, beginning with the "international ties" between physicians of Ancient Egypt, Babylonia, Mesopotamia, Ancient Persia, Greece, Rome, and other countries of the Ancient World, continuing through the Crusades of the Middle Ages and

the European epidemics and "plagues" which led to the first quarantines, up to the great geographic discoveries, and creation of first universities, scientific societies and medical journals, and right up to the Industrial Revolution at the end of the 18th century, which really put an end to national isolation.

The second period of the development of regular international scientific-medical ties and cooperation in the control of epidemics lasted from the beginning of the 19th century to the First World War.

During this time, agents and the mechanisms of transmitting many epidemic diseases were discovered. In the course of microbiological investigations and the first medico-geographical expeditions, many physicians and scientists displayed genuine heroism, which promoted public respect toward medicine, as well as further professional and ethical kinship of the best representatives of the medical profession and science. Truly international scientific-medical schools were established in the 19th century. The International Red Cross was founded by A. Dunan; social-hygienic investigations were begun in England, and then in France, Germany and Russia. The number of medical books and papers, and regular scientific-medical journals swiftly increased. The middle of the 19th century began witnessing at first national, then international, congresses of doctors and scientists, and the emergence of international medical societies. It became gradually evident that arbitrary measures which certain countries took in order to protect their frontiers from dangerous epidemic zones were insufficient, illusory, and expensive. This prompted the need to gradually go over from national efforts to international measures and to the international sanitary conferences and the first sanitary regulations. The "International Bureau of Public Hygiene," established in Paris in 1907, became the first permanent intergovernmental organization dealing with health and anti-epidemic questions.

The third period of development of international medical cooperation between the First and Second World Wars was relatively short and was characterized, on the one hand, by continued, though with much less enthusiasm, activity of international societies and congresses, further growth of medical publications and so on, while on the other hand, by a sharp polarization of medicine in relation to social and political problems. New public health systems of Soviet Russia emerged on the international arena at that time, and were first met with

shock and mistrust, but later with deeper and more serious interest, since public health measures in the Soviet Russia were based on few basic principles, which though they had been thought about by the great thinkers of the past, had never before been put into practice.

At the same time, the 1930's witnessed a degradation in medical science and practice in Nazi Germany, where many prominent scientists were oppressed or emigrated from the country, while the Nazis with a medical degree tried to justify a man-hating racist theory, and later resorted to mass "euthansia" of mental patients, and to monstrous "medical" crimes against humanity, which upon the end of the Second World War were condemned at the Nurenburg International Tribunal.

And finally, the fourth contemporary period of international health cooperation is characterized by its swift and diversified development, reflecting radical changes in the world during the postwar period. Even though the chilly winds of the Cold War had a negative effect upon the international cooperation, confrontation of states and political systems gradually gave way to a dialogue, search for mutual understanding, and to cooperation between nations. Fresh impetus was given to international congresses and conferences. Hundreds of international medical societies and associations came into being. The trickle of medical and scientific literature turned into a huge Niagara Falls of information. The general scientific and technological revolution began to embrace biology and medicine more and more.

If between 1946 and 1948 when the WHO was being established only 52 countries participated in its work, a few years later, the collapse of the colonial system led to a rapid growth of its members (145 at the present moment). The enormous health needs of the developing countries at first "astounded" specialists and statesmen, and then compelled them to chink more and more about these problems and how they could be resolved. Besides WHO activities, the recent period has been characterized by the signing of inter-governmental agreements on cooperation in the field of public health and medical science between various countries on a regional basis (Scaninavian, Arab, African, Latin American, and other countries), as well as between countries with different social and political structures. We consider the USSR's agreements on cooperation in the field of medicine with France (1969), with Italy (1970), with the USA (1972), with Great Britain (1975) and other countries to be among

the most important agreements.

A significant role in international public health cooperation is played also by the Red Cross and Red Cresent Organizations, as well as by non-medical organizations, such as Friendship Societies, voluntary organizations, private foundations, international banks and many others. All this reflects a considerable increase of public involvement in problems of health and medicine, their growing social, political and international significance.

All this is due to many important factors, and, in particular, to more profound understanding of the very concept of "health," as of "life unconfined in its freedom" (K. Marx), or "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" (WHO Constitution). Health is now considered as an obligatory condition for happiness, full life and dignity of Man; it is one of the greatest social and moral values, as well as one of the main goals of social and economic progress as a whole. And finally, the protection of health as one of the inalienable rights of Man has been fixed in international documents, moreover, not as an abstract right, but a specific one, or as Dr. Philip Lee put it, a "classified" right.

Individual and public responsibility for health protection and promotion has lately become especially obvious, since health is predetermined by a whole number of diverse biological and social factors, closely dovetailing with each other. Many of these factors, and, in fact, the entire way of modern life, are changing very swiftly. To illustrate this point, here are only some of the most important changes having a considerable impact on human health and the activities of public health agencies in many countries. These changes include:

(1) changes in economy, continuing urbanization, education and mass information, growing psychological stress of life;
(2) increasing chemical, physical and biological pollution of the environment;
(3) rapid growth of the population in many countries and changes in the age structure of the population;
(4) changes in the status of health, morbidity and mortality structure; excess consumption of drugs and chemical products;
(5) significant quantitative and qualitative changes have, no doubt, taken place in medicine

itself. These changes include:

(a) changes in biomedical science;
(b) achievements in controlling epidemic and communicable diseases in the economically developed countries, and their high incidence in the developing countries;
(c) general increase in the cost of medical care;
(d) shortages (in many countries) of medical, scientific and auxiliary personnel; uneven delivery of care for different social groups in many countries.

And last but not least, a whole number of medical problems, which previously interested only people of the medical profession or the governments of certain states, have outgrown national frontiers and have turned into international and worldwide problems of public health which, in principle, require the concerted efforts of governments and peoples of many countries and international organizations if they are to be resolved. These problems include, in particular, the international coordination of biomedical research; the control of epidemic disease; the study and development of methods of preventing and treating widespread cardiovascular, cancerous, hereditary, viral and other grave diseases, as well as parasitic disease endemic to tropical countries (onchocerciasis, schistosomiasis, filariases and others); protecting and improving the natural environment; effective control over the quality, safety, efficacy and side effects of drugs; helping the developing countries of the world in building and developing effective national systems and health services, and in training national personnel, as well as the study of the population dynamics, present and possible future changes in its age structure, birth rates and mortality, morbidity in different countries and regions of the world. This is closely related to the problems of nutrition and control of disease caused by undernourishment and hunger.

All this has had profound influence on international health cooperation, which today involves not only individual scientists and doctors, scientific societies and nongovernmental organizations, but the governments of all the countries of the world. As a result, international health cooperation is not a pleasure, nor a privilege. It implies, first and foremost, a great responsibility for science, for our nations, for the

whole of mankind and for future generations. And it is precisely this responsibility that I want to speak about in the time that remains.

We consider the Agreements between the governments of the USSR and the USA on cooperation in the field of public health and medical science and on developing an artificial heart, signed in Moscow in 1972 and 1974, as being exclusively important and representing a turning point in the development of international health cooperation. The significance of these Agreements lies not only in the fact that we really are able to do more than others in the field of medical science and practice, but in that these Agreements have emerged as a symbol of international detente and cooperation. It is indeed symbolic that two of the biggest industrial and political powers of the world decided to pool their efforts in protecting the human life, even though it was by no means easy to come to that idea and find the relevant forms and methods of work, especially at the beginning. We regard this as a manifestation by the governments of the two countries of a profound understanding of their responsibility for mankind in this important sphere of life. Yet, no less important was the decision to restrict the cooperation, at the initial stages, to three of the largest and most complicated problems: problems of cardiovascular diseases, cancer and environmental health. It was agreed to expand the sphere of Soviet-American health cooperation only gradually as more positive experience is accumulated in the initial areas of work.

Great attention was given by both sides to the methodology of this cooperation and its specific forms. This was, without a doubt, quite correct, because scientific terminology, research standards and methods, certain types of equipment, diagnostic criteria and methods of evaluating clinical data differ significantly in our countries, just as in many other countries of the world. That is why, before large scale joint research efforts were begun, much preparatory work was performed, and, to a considerable extent, this made it possible to overcome both informational and methodological barriers in science.

We consider it important that cooperation between the USSR and the USA is based on direct contacts and exchanges between scientists directly engaged in the most important cardiovascular, oncological, hygienic and other research. At the same time, the overall control of cooperation is in the hands of the Joint Soviet-American Commission on Health Cooperation, established in

accordance with the Inter-Governmental Agreement. Now, this Commission is in its 4th session, and we can note with profound satisfaction the definite positive results and the development of Soviet-American medical cooperation, as well as the pleasure of working in a constructive way with your representatives in this Commission: Roger Egeberg, Charles Edwards, Theodore Cooper, Paul Ehrlich and many others.

In the past year alone there were significant exchanges of specialists between the USSR and the USA. Important scientific symposiums and conferences have been held. Concrete studies were made of mutually coordinated programs. Joint papers on space biology and medicine, myocardial metabolism, chemotherapy of tumors, cardiovascular surgery, environmental hygiene and other important questions have come off the press or are being printed. The periodic exchange visits of the Health Minister of the USSR and the HEW Secretary of the USA were of great significance for mutual understanding and the stimulation of cooperation. During these visits, there were meetings with the top government leaders of both countries. We indeed hope that this tradition will be continued in the future.

Once again, I would like to emphasize that we consider with satisfaction the mutually advantageous results already attained and the future prospects for Soviet-American cooperation in the field of public health and medical science. It meets fully with the vital interests of our two states, as well as of all the other nations in the world.

What is more, Soviet-American cooperation is not taking place in a vacuum. We work in the World Health Organization. We have commitments with respect to other friendly countries, including the developing countries of Africa, Asia and Latin America, where the problems of public health are far from being resolved.

According to WHO data, more than 80% of the population in the developing countries, especially in rural areas, in general, have no access whatsoever to any kind of medical care. Yet an unsatisfactory health care is characteristic not only of the developing countries, but also of many economically rich states. I do not think there is any need to give examples, but I do hope that you will agree that we are not doing by far everything that we could do in the field of public health and medicine. That is why, when looking backward at the past and feeling a sense of satisfaction with our contemporary bilateral and multilateral medical programs, we must give

greater thought to the future. Therefore, I would like to touch upon a few problems where international cooperation may prove especially fruitful, providing we approach it seriously and with due responsibility.

First of all, it is clear that future success in protecting and improving the health of the population in many countries will depend on understanding the essence of public health as a social, dynamic system, as well as on further improving the forms and methods of this system's activities. We are directly responsible to our peoples for making the full use of all that is valuable and useful in science and in medical practice in our own countries and abroad, modifying it in accordance with national conditions. It is worth noting that the national public health systems even today are developing as components of an already crystallizing, although still shaky, international system, and consequently, should have common points of contact, comparison and general approaches to solving the most important medical, scientific and practical problems.

There has been a lot of discussion lately in many countries and international organizations as to the past and future of public health and medical science, touching upon a wide range of questions: from the role of private practitioners, the hospital and nursing care, to general problems of national and international health. However, these discussions often fall short of their mark--they become lost in details and fail to grasp the main core; they do not give an overall concept of public health and the basic laws of its development. The difficulty is aggravated by the absence of a generally acknowledged international definition of the concept of "public health" (at least as "health" is defined in the WHO Constitution), as well as by the fact that in many countries the term "public health" is preceded by unspecified epithets, such as "communal," "basic," "primary," "integrated," "comprehensive," "national," "regional," etc. This has been noted in the organizational study of the WHO Executive Board (1973).

In our opinion, the way out lies in a systematic approach, both to society as a whole, and to public health and medical science. The activity of health establishments and various complexes of measures should be regarded in the light of the historical evolution of a single functional system which human society has been building and implementing at various stages of its development in any country. We note with satisfaction that already the Fifth General WHO Program for 1973-1977

notes that in the turbulently forming complex of political, economic, social, cultural, technical and psychological systems, based on the geophysical structure of the environment, public health occupies an important position, being represented in each of these systems, and influencing the whole structure by its dynamism. It also notes that the public health services are no longer regarded as a complex of purely medical measures, but are considered an important component of the social-economic systems, combining all economic, social, political, preventive, therapeutical and other measures, which human society in any country and at any stage of its development uses for protecting and steadily improving the state of health of each individual and society as a whole (WHA 24.58).

We consider it very promising at the present time to make a comparative structural-functional analysis of medicine and public health, with due consideration for the economic and methodological aspects in management of public health. Much has been done in that direction in recent years, and many attempts to build "models of public health" for certain countries, cities, and states have been published, as well as many projects and bills of reforms for organizing medical care to the population. However, the majority of these proposals and models are of a restricted or narrow nature, geared to solving specific tasks or building simplified "micro-models" of certain units, services or programs of public health.

Unlike this, we emphasize the significance, first and foremost, of building a general conceptual model ("macro-model") of a national health system--one which could be used for better understanding of the regularities governing the development of that system and of its management. We have stressed the need for such a general model of a health system in the sense that one may speak of a general model of an automobile, aircraft or some other technical system. Such a model should make provision for all the main units and their interrelations. Of course, there still remains a tremendous gap between recognizing public health as a functional system and defining the basic principles of its activity, and its practical organization. This gap might be compared with the distance between an idea of building a home and the real construction of such a structure. Yet, the availability of "macro-models" will make it possible to cover this distance at a much faster pace. Such a generalized model does not obstruct; on the contrary, it promotes the development of specific models of public health services

for any concrete tasks and conditions.

It seems apparent that the two extreme types of public health organizations, between which there may be a multitude of intermediate types, will be, on the one hand, a conglomerate of hospitals, private doctors, scientific laboratories, pharmaceutical firms, pharmacies, charity societies, insurance companies, municipal agencies, universitites and so on, and so forth, which is often regarded precisely as a "nonsystem" of public health but which, incidentally, was aptly described by W. McNerney (1974): "if this is not a system...then try to break it;" while on the other hand, there may be a more clearly defined public health system with interrelated functions and corresponding types of establishments.

Not only economists, mathematicians or specialists of systemic analysis should participate in resolving these questions, but, first of all, doctors, scientists and other people of the medical profession, who best of all know the weak spots in a public health system. I must agree with Charles Edwards (1975) in that the medical profession must play the leading role in mapping out the ways for the further development of public health as a whole, as well as its specific services and establishments in particular.

Systemic analysis and modeling of public health are, at present, being actively elaborated in the USSR in close collaboration with the International Institute of Applied Systemic Analysis in Vienna, but we believe that this work could be carried out more actively and with greater success with the participation of the specialists from other countries, and of course, with WHO experts.

Yet, a reorganization of management of health agencies alone is not sufficient. In order to effectively protect and improve the health of the population, it is necessary to make use of the available knowledge, all the achievements of modern science, and you know just how difficult this is. It was by no means a coincidence that the 25th Health Assembly (1972) noted with alarm that there was a large gap between scientific achievements in biomedical sciences and their practical implementation by public health services in order to improve the health of the population in the majority of countries (WHA 25.60). More than that, the present level of science is not yet allowed to resolve many practical problems in public health and demands pooling the efforts of scientists of many countries. Hence the need to develop a new, modern methodology for the international coordination of scientific research, based mainly on the efforts of the

national institutes of the WHO member-states, on a totally voluntary basis for their participation in international programs, the repudiation of scientific "arm twisting" and dictates, as well as "brain-draining" methods. Perhaps the prototype of the new research coordination methodology will be the International Cancer Reserach Program, now being developed following a decision of the 26th WHA. This program may be based on coordinating the most promising trends in research, as well as on an international unification of research approaches and methods and on a flexible information system. This program has been elaborated by the WHO, IACR, IUCC and IIASA since 1973, on the initiative of the USSR, the USA, Great Britain, the GDR, Czechoslovakia, Bulgaria and a number of other countries, precisely because the problem of cancer is not only a very acute and timely one for many countries, but an extremely complicated one, which makes its solution by the efforts of some single country or the uncoordinated efforts of many countries highly unlikely (WHA Resolution 26.61). We believe that this program can make further headway. Today, however, it is necessary for the responsible national establishments in all the leading states to realize the significance and feasibility of this program, and undertake concrete efforts for its elaboration and implementation, without introducing into it some of their internal discord or contradictions.

The further development of international cooperation in the field of biomedical science presupposes, of course, greater social and ethical responsibility of scientists, practicing doctors and public health officers, not only in speeding up the practical implementation of the results of scientific achievements, but also in correctly understanding the moral and ethical problems of modern science, in protecting the human rights in the course of experimental and clinical investigations, and for using the achievements of science only for the benefit of Mankind, never to its detriment. All these problems are being widely discussed today in many countries.

The third important question: in the previously mentioned worldwide problems, we spoke about the aid to the developing countries in building effective public health systems and training national personnel. This, too, is a great responsibility for all the countries in the world and for the WHO. It is, after all, quite a paradox that, throughout the 25 years of the WHO's existence, whose past and present activities are viewed very highly by us and considered to be exclusively useful for

all countries, there is not a single actual example of when its aid really enabled any developing country to build an efficient national health system and train the necessary number of personnel, profoundly realizing their social and professional duty in protecting and improving the health of their own people. We are happy that the WHO Director General, H. Mahler, and his Assistants, T. Lambo, A.S. Pavlov, R. Tehada and others are willing to evaluate the past and to outline new ways for the Organization's work in the future. This should be the target of particular attention in the Sixth WHO Program of activity, which is now being drawn up, as well as in long range projects and forecasting works of the WHO for a longer period of time (H. Mahler calls this "the mission of the WHO").

As we see it, the WHO should play an important and leading role in helping the developing countries to choose priorities, to compile properly balanced and comprehensive plans for developing public health and training national personnel. In this great undertaking, an important role belongs to other specialized agencies of the UN, as well as to the International Reconstruction and Development Bank and other organizations. Yet, I hope they will understand it correctly, if I say that defining the most rational priorities and programs in the field of public health may be done best of all by the World Health Organization, whose recommendations are considered by governments in a most serious manner. That is why the WHO must not (and I would even say, it does not have the right to) automatically agree with this or that major initiative that is proposed, though with good intentions, but sometimes, without sufficient scientific and methodological foundations.

Of exclusive importance in this respect is the WHO's own experience and its successful and unsuccessful programs, of which the most well known are the global smallpox and malaria eradication programs. I would like to dwell on them once again, because now it is important not simply to recognize the success of the anti-smallpox program and the failure of the anti-malaria compaigns, but also to understand the reasons which brought this about.

It is quite apparent that the smallpox eradication campaign was successful not because of brilliant ideas or extremely efficient administration (although both factors existed, yet this was not the main thing), but because of a number of important factors: the characteristics of the smallpox virus and the absence of its natural reservoirs or intermediate hosts in nature, long anti-smallpox

immunity, improved especially throughout by the vaccination campaign methods, and by registering morbidity, and so on. And, finally, its success was due to the positive experience in the cooperation of the WHO with many national organizations, both after the launching of the global smallpox eradication program in 1958, and after its intensification in 1967. That is why we consider as extremely important the decision of the last World Health Assembly on summing up the results of all anti-smallpox programs, thereby preserving for Mankind the unique historical experience in eradicating one of the most dangerous diseases as a result of effective international cooperation, which undoubtedly will be used in programs for controlling other infections (WHA 28.52).

On the other hand, the malaria eradication program could not but be a failure, since it was based on an insufficiently deep study of all the aspects concerning reproduction of the malaria causal agent. It was based on a single method--breaking the cycle of transmission of malaria by massive application of DDT against mosquitoes, and did not include comprehensive measures upon all the links in the epidemiological cycle, including detection and active treatment of malaria patients. It was naively thought that the activity of whole national public health systems could be substituted by specialized anti-malarial teams and so on. Incidentally, all this was well known long before failure of the anti-malaria program became obvious.

Yet, today it is not a matter of once again leveling belated rebukes at the initiators of the global malaria eradication program for errors committed, but to take into account these lessons for the future. Malaria still remains one of the most important causes of morbidity and mortality in many developing countries, especially in Africa, and a re-examination of the global strategy of that program does not mean giving up the struggle against this grave disease. Besides malaria, it has become possible to see more clearly the real scope of the problem of other parasitic dieseases, endemic in tropical countries, first of all, schistosomiasis, onchocerciasis, filariases and others. The need to intensify the efforts to control these diseases, making use of all the national and international means and methods, is quite apparent. However, planning these programs for almost 20 years ahead, the tragic mistake may be repeated if timely attention is not given to the conclusion of the WHO Consultative Committee on Medical Reserach (1974) that the research of methodology and

control of these diseases, including questions of immunology, diagnostics, prevention, treatment and others, is so far quite insufficient. That is why, without stopping the practical programs which have already been launched, we consider it necessary to step up the scientific research of tropical parasitic diseases, with broad involvement of relevant institutes and universities in the developing countries themselves, as well as all other national institutes that are ready to actively participate in working on the problem of tropical parasitology. (Soviet scientists, incidentally, are ready for this.) Important resolutions on these questions were adopted at the 27th and 28th sessions of the World Health Assembly, and we consider the practical realization of these resolutions of paramount importance.

And finally, a few words must be said about the question which attracts particular attention at this Conference, namely, primary care of the population of developing countries, especially those living in rural areas. This problem has been extensively discussed at the WHO Executive Board and Assembly, as well as in the UNICEF and other international organizations. Special emphasis was placed on the importance of ensuring at least elementary medical care for the rural population in the developing countries, as well as for the inhabitants of slum districts in big cities of many developing, and, in fact, in certain economically developed, countries. Quite a number of appeals were made for immediately tackling this problem and resolving it in the shortest possible time. Everyone agrees with this. Yet, if we are really willing to solve the problem of providing primary care to the population, we must do so in all earnestness, since verbal expressions of sympathy cannot do the job. Neither can it be solved by international charity campaigns, because the main thing that is needed is determination of the governments of each and every country to provide medical care to the entire population, and resolutely use all available means, methods and efforts to attain this goal. As we see it, the main question around which all discussions at international forums are concentrated is quite clear--should a system of primary care for the rural population be created as an integral component of the overall national system of public health, or as some kind of substitute of that system. The majority of delegates to the World Health Assembly, in our opinion, quite clearly and categorically rejected the second way as unacceptable. That is why the Assembly's Resolution (WHA 28.88) reflected, although not

always quite clearly, several important principles. It is very important to define "primary care" as the zone of the patient's first contact with the comprehensive national public health system. It is also important that the primary care should be provided to those layers of the population which are in special need of it, and should include health education, vaccinations, pre-medical care and so on. It is important that provision of primary care should be under the control of higher public health bodies and specialized health establishments in every country. It is also important that the primary care personnel, having limited medical education, should work under the guidance of physicians (or feldshers, nurses, etc.), and, when possible, to be replaced by skilled higher and paramedical personnel. Everyone rendering primary care should be provided with the opportunity to gradually upgrade his skills, going so far as receiving a regular medical education.

In other words, primary care should be regarded as one of the most important functions of a national public health system, but not divorced from the system. These and many other questions of provision of primary health care are complex and the Health Assembly decided to convene an International Conference under the aegis of the WHO for exchanging experience and opinions on this issue. The forthcoming Executive Committee session shall have to determine the time and place for such a conference, as well as its agenda. We believe that such a conference could contribute greatly to better understanding a number of problems connected with rendering health care to the entire population in many countries of the world.

In conclusion, the most important thing--international cooperation in the field of public health is geared to the future. We all have to recognize the growing social and international importance of public health, as well as the differences that exist between the systems of protecting and improving the health of the population, and their common interests. The coming decades will witness further sigaificant changes in the social life of many countries, which will have a tremendous impact on the forms and methods of health care. And we have to foresee these changes, to increase the efficiency of our own work, our own national systems of protecting and improving human health. Moreover, we have to map out principal ways of resolving global problems of public health. Within the framework of national and international health organizations, it is necessary to gradually and methodically coordinate all our efforts,

directing them toward common goals. Every successfully implemented international health program has a great impact on the development of national public health and medical science, and also promotes greater respect and mutual trust among nations. And, on the other hand, every failure of a program causes dissatisfaction, and significantly retards the development of international cooperation.

Hence, we see the main role and "mission" of the WHO as elaborating effective international programs and seeking ways to resolve public health problems. Today we all have favorable conditions for such work in connection with the successful completion of the International Conference on Security and Cooperation in Europe. The Declaration, signed by the leaders of 35 states, including USA and USSR, provides for a significant expansion and deepening of international cooperation on problems of health and medicine, including problems of the environment, cardiovascular and cancerous diseases, as well as problems of endemic diseases in tropical countries. The international atmosphere is being significantly changed also by the decision of the UN General Assembly, devoted to the establishment of a new order of economic and other relations between states.

In other words, we believe that international cooperation in the field of public health today has extremely broad prospects and represents a definite "challenge," not only to the medical world, but to the governments of many states. Whether this challenge is accepted or not depends on us. We are sure that in the future we shall see even more fruitful cooperation of many countries in solving the most important medico-social problems. It is our common responsibility and we, on our part, are ready to bend every effort in that direction.

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DAY II

PRIMARY HEALTH CARE: *MODELS FOR DEVELOPMENT*

Panel Workshops

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PANEL WORKSHOP:
Health Programs in Developing Countries (Morning Session)

Thomas R. Hood, Chairman
Kenneth W. Newell
Ramiro Delgado
Somboon Vachrotai

RAMIRO DELGADO

PRIMOPS* is a demonstration health program operated by the Cali Health District and the Universidad del Valle. This program delivers comprehensive health services to 100,000 people living in one of the poorest neighborhoods of the city of Cali. The average cost of the services provided is $5 per capita per year.

The Colombian Ministry of Health intends to replicate the PRIMOPS model elsewhere in the country if it proves to be successful in Cali. This would mean that in Colombia approximately 5 million people presently living in poor urban communities and 4 million living in rural areas eventually could be covered by the PRIMOPS type of health services.

The key innovative aspects of the PRIMOPS model are:

a) it is the primary care component of a regionalized health services system which provides for clinical backup and referral services to highly specialized levels at the University Hospital;
b) it delegates to auxiliary nurses and to "promotoras" (paid health promoters) some functions which had been carried out previously by physicians and/or registered nurses;
c) it includes a health extension service through which regular home visits are made by auxiliary nurses and promotoras from health posts who give health education and health services (including MCH, family planning and nutrition, each with appropriate follow-

*Spanish acronym for "Research Program in Models for Delivering Health Services."

up and referral), and who gather health/population information for the program.

PRIMOPS is the natural outgrowth of the pioneer effort initiated in 1958 by the Universidad del Valle in the semi-rural county of Candelaria, near Cali. The PRIMOPS approach follows roughly the same principles of the Candelaria experience, but in order to facilitate the evaluation and replication processes, it utilizes a greatly improved information system.

Tulane University has been involved in health research in Cali for the last 15 years, through the International Center for Medical Research, an NIH-sponsored program. In 1972, the Family Health Foundation began providing technical assistance to PRIMOPS, based on Family Health Foundation experiences in health/family planning services in New Orleans and elsewhere. When the need for technical assistance outlived the Foundation, Tulane University's School of Public Health, using faculty members and staff who were already familiar with Cali and PRIMOPS, was willing to continue the needed assistance. The International Program of the Institute for Health Services Research is now providing technical assistance to PRIMOPS, under a cost reimbursable contract with USAID. The consultants for such activities come from Tulane, other U.S. or Latin American universities and health-related organizations.

After contributing to the development of the PRIMOPS model, Tulane activities currently are centered mainly around the analysis, simplification and evaluation of the health delivery system being implemented in the Barrio Union de Vivienda Popular (UVP) of the city of Cali. These evaluations are carried out through the implementation of the six research studies listed below, and the development of area profiles for both the target and control group areas.

1. The first study intends to select a control area in Cali, similar insofar as possible to the demonstration area, and to establish the sampling techniques and cross-section samples to be used in making the comparison of the two areas. The control area was selected on the basis of income, racial composition, population and geographic characteristics. The samples drawn will be utilized to obtain data for comparison of the target and the control "Barrios" in 1975 (before), and again in 1977 (after). The community profiles are intended to provide detailed descriptions of the target and control areas, and to identify favorable community conditions worthy of being stressed in the replication phase of the program. The

background information gathered in these studies will be helpful in understanding the reasons for possible unexpected program results.

2. The second study intends to measure the degree of the community's acceptance or rejection of the health services offered, and will assess KAP changes. "Felt" morbidity and health service utilization are two other parameters being surveyed. Overall, the study will attempt to measure the degree of consumer satisfaction with the health services offered by PRIMOPS or by the traditional system. This will be a crucial element in deciding the merits of the replication of the PRIMOPS program.

3. The third study intends to measure, over time, changes in morbidity, mortality and fertility in the target and control areas. It is believed that this study eventually will serve to validate the assumption that improving the efficiency of the official public health services in poor communities does indeed result in improved health and survival as well as decreased fertility. This is a worthwhile effort, since few studies have documented the real impact of health services on health status. Naturally, it will take into account the concurrent improvements in water supply, sanitation and housing conditions included in the area profiles, which will complete the related environmental conditions necessary to establish cause-effect relationships.

4. The fourth study is expected to assess the adherence of service personnel to PRIMOPS norms and the quality of such services which, although heretofore performed by physicians and nurses, have been delegated to others under PRIMOPS. One of the purposes of this study is to counter probable attacks on the quality of delegated health services.

5. The fifth study intends to measure or define the roles and role structure established within PRIMOPS, the acceptance of PRIMOPS and of their own roles by the personnel of the project, as well as to analyze the interpersonal relationships within the project. This study will provide useful information for detecting personnel problems, and will offer the possibility of relatively rapid feedback to management for corrective modifications. The definition of role structure and of interpersonal relationships will provide important information for possible changes to improve the efficiency of the PRIOMPS program in its replication elsewhere.

6. The last study is aimed at the establishment of reliable cost-analysis procedures, allowing the measurement of cost-effectiveness and cost efficiency. Among the requirements to be met by PRIMOPS, the provision of low-cost health services is a most important one. Existing cost-

accounting procedures do not allow for the detailed analysis of cost data. It will be necessary to design better ways of allocating costs (simultaneous equations, cost centers, etc.), and consequently to be able to determine service costs by subprograms as well as by operational and development costs. Otherwise it will be very difficult to establish the feasibility of the replication phase.

The PRIMOPS services have been financed entirely by the Colombian Ministry of Health, based on its policy of strong support of regionalized services, decentralized administration, use of paramedical personnel, priority for maternal and child health, and extension of services to the poor. In the near future, Cali will be officially designated by the Ministry as a health region and the Cali Health District will be granted authority over the peripheral hospital, which is presently operating in the target area under state level authority. This decision by the Ministry of Health will place PRIMOPS in a key position to develop health services and evaluation methodologies at the national level.

The following are the services offered by PRIMOPS to the target area:

a) For the mother: prenatal care, care and supervision at delivery, postpartum care, and detection of cervical cancer.
b) For the children under five years of age: growth and development, including nutritional education, immunizations, and detection of morbidity.
c) For the couple: education, family planning and responsible parenthood, provision of contraceptive methods, and infertility treatment.
d) For the family: morbidity detection and care, supervision and treatment of certain prevalent diseases (TB), education and advice on environmental sanitation.

These activities are being carried out in various locales (levels of care), i.e. the family home, the health post, the health center, the peripheral hospital and the university hospital.

The Technical Assistance Project will provide Tulane with valuable experience, and an opportunity to test, under controlled conditions, various methodologies pertaining to the delivery of health/family planning programs in developing countries. Conversely, Universidad del Valle and the Colombian Ministry of Health will gain new knowledge as a result of this cooperative endeavor. But probably the

most important outcome of this effort will be the combined involvement of both the government and the academic community in solving one of the most pressing problems confronting today's developing world, i.e. that of delivering health and family planning services to fairly large numbers of people at costs which are compatible with the local resources.

The International Program will soon publish its technical assistance experiences in a book entitled, Methodologies for Organizing and Evaluating H/FP Programs in Developing Countries.

Planning, implementing, and evaluating an innovative, low-cost, integrated system of health care is a complex and awesome set of tasks which, in itself, requires considerable "integration" and coordination by a broad group of professionals. It is important, therefore, to make clear from the outset just what is meant by an "integrated delivery system," why it is an improvement on what preceded it, how it will function, what it may accomplish, and by which methods its process and impact will be tested and confirmed. In the following paper, an attempt is made to systematically and coherently relate the project design (with its underlying concepts and assumptions) to the operational strategies and implementation processes, their linkages to the expected outcomes and impacts, and the plans for evaluation.

A brief review of existing problems--both health status-related and health system-related--which stimulated the inception of the DEIDS approach will be an instructive background.

It has been made clear by the Ministry of Public Health that the present high rate of population growth, the morbidity and mortality of preschool children--with particular emphasis on malnutrition--are problems of the highest priority. If the priority of a health problem is determined by its importance (prevalence, seriousness, groups at risk), community concern about it, and its vulnerability to effective intervention (available technology and delivery vehicle), it seems clear that the general problems on which the DEIDS Project focuses are indeed crucial ones.

Although the problem areas of family planning, maternal and child health, and nutrition, are given special emphasis in the DEIDS Project, they are not the only health problems with which the project deals. The project seeks to modify the present health care system to produce an effective integrated system of health services delivery; because the base on which integrated delivery will be built is the existing health care system, all services presently delivered by that system will be included in the integrated approach.

A long list, which follows, classified as "health services administration" problems, had been discussed in the original DEIDS proposal:

a) No clear-cut national policy and national health plan

b) Low government health budget (only 3% of the total yearly budget
c) Out-of-date public health laws
d) Poor coordination between "producers" (universities) and "users" (Ministry of Public Health) of health personnel
e) Poor statistical health data
f) Inadequate health services (especially in the rural areas)
g) Inadequate production and maldistribution of health personnel
h) Poor coordination between public and private health sectors
i) Lack of communication between consumers and providers
j) Lack of community organization and participation in health services planning
k) Poor administration leading to fragmented health services resulting in duplication of both activities and resources
l) Highly centralized health services administration and organization
m) Inadequate coverage due to existing health infrastructure.

Some of the health system problems are relatively amenable to change; others are imbedded within the social system, making change more difficult. Change may be possible only as a result of broader socioeconomic transformations. Of the problems listed above, several are outside the scope of this project, which presently focuses on studying alternatives for health care delivery at the provincial level.

The present mechanisms for gathering data on health status are inadequate, particularly at the local level, and the data available is frequently unreliable. As a result, data crucial to planning and evaluating health services is unavailable or unreliable.

Another dimension to the problem of information--one which is more pronounced--is the inadequacy of data relating to the functioning and management of the health delivery system itself. Sufficient information is not routinely gathered concerning the inputs and outputs of official health services, depriving the system of feedback data important to monitoring performance and adapting to changes in the service environment. Moreover, data concerning functioning of facilities in the private sector is almost nonexistent.

Reflecting the general nature of Thai bureaucracy,

the Thai health care system is still highly centralized. Planning is done from the top down, and has been only minimally responsive to local needs. Program decision-making, budgeting, and promotions have been dominated by the distant central ministry, undermining local initiative and responsibility.

Health ministry data and special reports establish well the fact that the production of MDs and other health worker categories is inadequate to meet the needs of rural health care, as it is now organized. Moreover, underproduction is compounded by maldistribution, as physicians gravitate to population centers (particularly Bangkok), leaving the rural areas with critically scant physician coverage. Not all rural health centers designed to be staffed by physicians (first class health centers) actually have them, and less than 50% of the districts actually have such a health center; consequently, only about 30% of the districts have a physician-staffed health center. Coverage of tambols and villages by subcenters with midwives, nurses, and sanitarians, is even more sparse.

Coupled with the scant distribution of health centers and personnel is the problem of underutilization of the existing rural facilities. Many attribute this problem to the fact that most non-MD health personnel have neither sufficient training nor authority to engage in curative treatment desired by villagers. Well under 40% of the health care provided in rural areas comes from the official health care system, and surveys have clearly demonstrated that private sector facilities and practitioners (providing a very uneven standard and distribution of care) are utilized more frequently, often when a government facility is equally available. If the local populace view the skills of the government workers as inadequate or inappropriate, then this might be one component of what is termed "perceived" inaccessibility. But as some researchers have suggested, the perceived inaccessibility (by the rural folk) of health services may be due, in part, to such other factors as social distance between health worker and villager, a lack of empathy and patient-centered care, long periods of waiting for care, and other similar factors.

Only recently has the Ministry of Public Health taken initial steps towards integration--placing authority and responsibility for curative (e.g., hospitals) and health (e.g., MCH, sanitation, nutrition, etc.) services under one administration. At the provincial level, effective integration into a network of coordinated health care remains to be implemented. Consequently, health care services remain fragmented and are frequently duplicated,

despite the slim resources available. Referrals between the components of the system--from the various levels of rural centers into the hospital and back again--are rare, and are an important linkage mechanism yet to be established.

There are several aspects to this problem: The first concerns the limited contact and minimal impact that the official (government) health care organization has on the private sector components of the total health care system. There is little effective communication or coordination between the MOPH facilities and the multitude of private practitioners--both modern and traditional--in any given community.

A second aspect is the minimal input that consumers have in planning, organizing, and supporting the provision of services they consume. One-way communication is the practice--from provider to consumer--and services and personnel are deployed through central directives, not in response to the local needs and demands of the community.

The ultimate goal of the DEIDS Project is "to improve the general health of the target group served by a low-cost health delivery system." The purpose of the project is to provide a low-cost, "integrated" health delivery system for at least two-thirds of the women of childbearing age and children under six in Lampang Province. The integrated system, incorporating a number of innovations, will be at a cost the Royal Thai Government can afford, and replicable in other areas of the nation.

Before proceeding further, it would be useful to identify several crucial assumptions and definitions inherent in the above goals. First of all, it is tacitly assumed that an effective health care system has an impact on health status. Health status is obviously related to a variety of socioeconomic and environmental conditions, and the extent of the contribution that health care delivery can make is a much discussed question. However, it is assumed here that effective health care systems do have a measureable impact on health status. Moreover, it is hypothesized that an integrated delivery system, by the very nature of its structure and achievements, will have a greater impact on health status indicators with improved cost-effectiveness than a nonintegrated system in a comparable area, all other significant variables being equal. The DEIDS Project seeks to study this hypothesis and the linkages of the health care system processes to community health status indicators.

An integrated health care system refers to the total health care system (in this case, of a province) with its many components, both private and official. Acting as the

"integrating" center, the provincial health organization seeks to: (1) establish intercommunication, coordination, and cooperation with all sectors of the health care community; (2) introduce innovations and modifications to augment the health services infrastructure and to revitalize and extend the existing health care system; and, (3) develop adequate information feedback mechanisms to provide for continual monitoring and adjustment. As it is defined, an integrated system will more effectively and efficiently utilize available manpower and resources to provide services to the populace at a level appropriate to the problem; it will expand coverage, and resolve the problems of health personnel maldistribution, underutilization of rural health facilities, administrative fragmentation, and resource and effort duplication. Although the total cost of services in the province is not expected to decrease, integration should increase the quantity and quality of service per unit cost. The cost per unit of service is expected to decrease, and this improved cost-effectiveness is the accepted definition of the term "low cost" for the purposes of this project. Because the key features of this integrated health care delivery system incorporate only modifications of resources presently available, and will improve the quantity and quality of health services more effectively and efficiently (increased output of services at lower cost per unit service), replication throughout the Kingdom of Thailand should be desirable and justifiable to national planners and official decision makers.

The overall project strategy is to establish an integrated system in a "representative" demonstration area of sufficient size to permit collection and analysis of valid data. This demonstration area is Lampang Province with a population of approximately 600,000. Once data concerning baseline conditions have been collected, the adaptations and innovations which constitute an integrated delivery system would be introduced. By continual monitoring through an extensive (and, sometimes, innovative) information system, and by follow-up community surveys, program progress and impact on the key variables is monitored and evaluated. The DEIDS Project strategy may thus be categorized as a quasi-experimental study which will test the process and effect of project interventions in the "experimental" areas as compared/contrasted concomitantly with the "existing" health systems in two control areas (one control within the province and one control outside of the province).

The pre-DEIDS provincial health care structure was organized so that both the provincial hospital and all

peripheral health centers were nominally under the responsibility of the Provincial Chief Medical Officer (PCMO). The units normally under the PCMO are:

1) The Provincial Hospital, in Lampang, a 250-bed facility which is frequently overutilized 20-25% beyond its optimal capacity. Approximately 300 to 400 patients are seen in the outpatient department daily.

2) Medical and Health Centers (formerly called "First Class Health Centers"), located at the district administrative level, normally staffed by an MD, a nurse, midwives, and sanitarians. Services are proportionately balanced between curative and preventive.

3) Health Subcenters (including what were previously called "Second Class Health Centers" at the tambol level), are staffed by a midwife and a sanitarian, and provide primary health care, mostly preventive.

4) Midwifery Centers, the lowest level of government health facilities, are located at the village level and staffed by a midwife, providing predominantly MCH services.

A small proportion of hospital services are preventive (about 25%), while the majority are curative. At the Medical and Health Center level, preventive and curative services are evenly distributed, and at the Health Center and Midwifery Center levels, services are predominantly preventive.

In practice, however, there has been minimal coordination and integration of services between the hospital and outlying health units, and the outlying health centers have been able to cover only a fraction of the population.

The following operational strategy is an attempt to reorganize and integrate the provincial health system:

1) To focus on MCH, FP and nutrition services for the target group, assure that patients receive care at a level appropriate to their needs by establishing an infrastructure, demonstrate effective cooperation and referral among the provincial hospital nucleus and the outlying health centers (beginning with those in Hang Chat District).

2) Assure that rural facilities provide the appropriate range of services which are accessible and receptive to rural patients, by adding new categories of health personnel (wechakorn) and by retraining the present health staff.

3) Greatly extend the rural health delivery system, facilitate entry into it, and overcome the gaps in utilization by recruiting cadres of volunteers (Health Post Volunteers, Indigenous Midwives, Communicators).

4) Establish community advisory groups to help plan, modify, and support services.

5) Involve the private sector to the greatest extent possible.

The strategy of integration becomes more meaningful through discussion of the details of reorganizing the health care infrastructure and introduction of innovations.

The first step was to strengthen links between the provincial hospital and the network of peripheral health centers to achieve a proper balance and coordination of curative, preventive, and health education activities in and between functional units. This was begun by several planned steps:

1) Establishing a Department of Community Medicine in the provincial hospital.

2) Expanding the OPD in the provincial hospital and establishing a direct referral system from the Medical and Health Center (Hang Chat District).

3) Orienting the hospital and health center staffs to the DEIDS approach to integrated delivery of services.

4) Rotating hospital MDs through the Medical and Health Centers.

Paraphysicians ("medex," known in Thai as wechakorn) is one of the major new groups to be introduced into the Lampang health delivery system. A total of 85 paraphysicians will be deployed; five of the first group will be deployed in the hospital outpatient department, and the rest in the peripheral health centers and subcenters. In the past, there have been few physicians resident in any of the facilities outside of the provincial hospital, and this is cited as a major reason why villagers bypass health centers and go directly to the hospital or private MD clinics in the provincial capital. The one year of competency-based medical and health training will prepare the paraphysicians to deal with the most frequently occurring health problems, and to recognize those more complex problems which require the attention of the more highly trained and skilled physicians. They will also be trained in preventive medicine and health technology which will be major elements in rural health center preventive/promotive work. Consequently, it is expected that the paraphysicians will be a key group in providing MCH, FP, nutrition, and other integrated health services.

Since paraphysicians are a truly new type of health care professional in the Thai health delivery system, whose work, training, and responsibilities are closely aligned with those of physicians (under whose supervision they must function), their selection and training must be accomplished with great care. Of the first group of 15 paraphysician trainees, all (both male and female) are

experienced and respected nurses, sanitarians, or midwives, and this--together with the full endorsement and support of the physicians--should serve to reduce some of the normal initial reticence of both patients and professional colleagues.

The introduction of Communicators and Health Post Volunteers (HPV) is an important thrust of the integration strategy designed to reestablish the credibility of the official health delivery system, to facilitate entry into it, and to greatly expand its coverage to all village areas. These volunteer groups are also a first-line source of simple first-aid care, referrals, and health conditions reporting. Because these volunteers (selected through communication sociogram studies and village committees) are influential members of the local village communities, they are expected, by their empathy and similarity to their village peers, to overcome whatever social gap might exist between the patient-consumer and the government provider.

Communicators, after their brief training, predominantly act as the first point of contact at the interface between the patient target groups and the health delivery system. There is one Communicator for every 10-12 households in the project area. Oriented to recognize the health problems most common to the area and the personnel and facilities available to deal with them, they initiate the flow of patients into the network of integrated services, beginning with the Health Post Volunteer. They are also available for follow-up after services have been received.

Intermediate between the Communicators and the first level of the official health delivery system, Health Post Volunteers (HPV) are deployed (chosen by the Village Consumer Adjunct Committees) about one to each village. During a two-week training period, the HPVs learn to recognize the common illness found in their area, and to give first aid and treatment for simple ailments and injuries, using the basic nonprescription medicines available in health centers. They take care of patients who come to them directly, or who are referred by Communicators, and send patients needing more sophisticated care to the health centers. Each HPV is responsible for monitoring activities of the approximately ten Communicators in his or her village, and in cooperation with local government health staff, supports the activities of the Child Nutrition Center. HPVs have been designated as the recorders of births and deaths in a pilot vital events monitoring activity to gather vital statistics which can be compared

with the presently inadequate civil registration system.

A further innovation to the delivery system is to train indigenous midwives in each of the province's villages in order to upgrade their technical skills and coordinate their activities with government health services. Indigenous or "granny" midwife training is not new to Thailand; however, the impact of past training on midwife performance seems to have been marginal, probably because of the midwives' older ages and rigidity, the style of training, and the lack of supervisory follow-up by the government midwives and nurses. The Consumer Adjunct Committees have been utilized in the selection of younger and respected indigenous practitioners who may be expected to be more receptive to training. Moreover, the presence of the volunteer communicators and HPVs will add support for integration of the midwives' work into the broader health care system. The integration of the traditional midwives is one aspect of the project's aim to involve private sector health care facilities and practitioners in meaningful and feasible ways.

To establish a receptive and participatory base in the community, orientation meetings have been held in key centers of influence to explain the DEIDS Project and to request their support. Among these groups were the provincial governor and his staff, the district officer and his staff, the education officer and his staff, and the provincial, district, tambol, and village councils. At the same time, project staff assisted in establishing project advisory groups and consumer adjunct committees at each local level by forming new groups or reconstituting existing village committees. Village advisory committees have been set up uniformly to participate in health planning, and personnel selection and management decisions. The committees are expected to give continued support and feedback concerning performance of integrated services.

Considering the magnitude of the training, orientation, data collection and resource reallocation, the DEIDS approach must be implemented in phases, beginning with Hang Chat District, extending successively to each of the other ten districts and subdistricts, and finally encompassing the whole province. The strategy necessitates a division of project labor resulting in the formation of four functional divisions: (1) Medical and Health Services, responsible for implementing all operational facets of the DEIDS health service delivery system; (2) Personnel Development, responsible for retraining and orienting existing health staff, and for training new categories of workers; (3) Information, Evaluation, and Research, charged with

organizing and coordinating the system of data collection and analysis by which program progress and impact may be measured; and (5) Administrative Services, providing crucial fiscal and logistical support to all project efforts.

Evaluation is one of the most important components of the DEIDS Project. The goals of evaluation are to measure project impact on health, evaluate the process of project operations, and project replicability. A pretest, post-test control groups experimental design is being used. The overall data collection system is composed of several interconnecting parts; the major components are: Community Health Surveys, Vital Events Monitoring System, Clinical and Health Services Records Study, Nutrition and Dental Health Surveys, Administrative Analyses, Task Analyses, and Cost Analyses.

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PANEL WORKSHOP
Health Problems in the Urban Setting

Donald C. E. Ferguson, Chairman
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DONALD C. E. FERGUSON

The problem of providing health care to the growing flood of migrants and disadvantaged groups who live on the "septic fringe" of cities and within their slums is a sizeable and pressing challenge to any culture. Problems of cost, access, continuity of care, facilities and staffing, while less pressing in urban than in dispersed rural or remote settings, nonetheless provide health planners and providers with organizational, political, and economic questions not easily resolved. In urban settings, high population densities present health risks, but they also make health services potentially more cost-effective. In cities, trained personnel are more numerous, available, and somewhat easier to recruit, even though no less expensive. Basic facilities exist and are in place, and organization and cooperation, though not necessarily funding, are easier to arrange. These factors seem true in most urban cultures.

When discussing international health, I tend to think in developing country terms largely because of personal involvement for the past decade. In the strict sense, however, international health is a trans-national matter, and both developed and developing countries and urban and rural settings fall within the terms of reference. Although less clearly, health problems of cultural and ethnic minorities in many developed countries present some of the same challenges as are found in developing countries. Having spent several years working in a developing country called West Virginia, I only later recognized problems of Appalachian health care organization in many countries in the world.

Today's panelists will concentrate on urban programs for ethnic and cultural minorities. Although those

presented are US-based programs, there are principles and lessons that can be generalized to other national milieus.

Since I view the world from a Canadian window, I have been reflecting on the health care scene in both the U.S. and Canada recently. Canada is America's most similar commercial, linguistic and cultural neighbor. Its medical culture, health institutions and customs have been and are similar today. The U.S., however, as a result of developments which have taken place over the last 15 years in Canada, now has the distinction of being the world's last industrial nation without either some form of national health service or national health insurance. Were financial barriers removed, some programs we will hear about today would still be needed, but might not exist. There are instructive lessons from the Canadian experience that should be borne in mind as the groundswell for national health insurance grows in the United States. I will therefore take the unfamiliar step of presenting a few aspects of the Canadian experience by way of comparative introduction to the larger problem of the need for a reconceptualization of the health care enterprise.

First, however, a little background about Canada. Canada, as you know, is a young, developed, but also developing country with a comparatively affluent economic base. Although the world's second largest nation in terms of land mass, nearly 90 percent of its population lives within 100 miles of the United States Border. Some of Canada's demography can be understood in terms of its climate. Much of it is under snow for half the year, and the extremes of termperature can be said to be "bracing," or, put kindly, challenging.

The population of 22 million is two-thirds urban, with 65.4 percent of its people living in 2,120 cities, towns and villages, often widely separated. Some 15 percent of the population lives in cities of over 400,000 persons. The provinces of Ontario and Quebec account for nearly 14 million of the 22 million, and although these are physically the two largest provinces, they are both over 80 percent urban.[1] In Canada, because of size, dispersion, remoteness and clustering, there are still many pockets of poverty and people who have yet to benefit from the general affluence of the country. Medical care facilities are widely distributed, but there are many difficulties in getting health care to remote, dispersed, and rural areas in much of the Canadian North.

Prior to the advent of federal-provincial hospital and medical care insurance schemes, hospitals were primarily supported from community, municipal, or sectarian religious

treasuries, with payment for services at first by individuals and later by private hospital insurance plans. A national Hospital Insurance and Diagnostic Services Act became effective in 1958, however, and was adopted by each province. By January of 1961, mearly 99 percent of all Canadians were covered by provincially-operated and administered programs with cost sharing by the federal government. Some 11 years earlier, the Province of Saskatchewan had led the way in 1947 with an entirely provincially supported scheme. Later, in 1962, Saskatchewan demonstrated its leadership and social concern once again by enacting and implementing a medical care insurance scheme six years in advance of the federal government.

In July of 1968, the Federal Medical Care Act became effective. By 1971, all provinces had implemented programs for financing medical care. Minimum criteria required for federal cost sharing are as follows:

"Comprehensive coverage must be provided for all medically required services rendered by a physician or surgeon. There can be no dollar limit or exclusion except on the ground that the service was not medically required. The federal program includes not only those services that have been traditionally covered as benefits to a greater or lesser extent by the health insurance industry, but also those preventive and curative services that have traditionally been covered through the public sector in each province, such as medical care of patients in mental and tuberculosis hospitals and services of a preventive nature provided to individuals by physicians in public health agencies.

"The plan must be universally available to all eligible residents on equal terms and conditions, and cover at least 96 percent of the total eligible provincial population. This 'uniform terms and conditions' clause is intended to ensure that all residents have access to coverage and to prevent discrimination in premiums on account of previous health, age, nonmembership in a group, or other conditions. If a premium system of financing is selected, subsidization in whole or in part for low income groups is permitted. It has been left to individual provinces to determine whether its residents should be insured on a voluntary or compulsory basis. Utilization charges at time of service are not precluded if they do not impede, either by their amount or by the manner of their application, reasonable access to necessary medical care, particularly for low-income groups. The plan must provide portability of benefit coverage when the insured resident who has paid his premiums, if any, is temporarily absent from the province, and when moving residence to another participating province. The provincial medical

care insurance plan must be administered on a nonprofit basis by a public authority that is accountable to the provincial government for its financial transactions. It is permissible for provinces to assign certain administrative functions to private agencies."[2]

Each province has considerable range of choice on administrative arrangements and the way in which it will be financed. Some provinces finance their plans through sales tax, premiums, general provincial revenues or combinations of these methods. In fiscal year 1972-73, federal contributions to the provinces totaled $631 million. There are a small number of federal categorical beneficiaries, such as certain native Indian and Inuit (Eskimo) groups. Although veterans receive federal benefits and services, the Government of Canada has begun turning over veterans hospitals to the provinces.

As to costs, health care costs about seven cents out of every dollar earned by Canadians. In per capita terms, roughly $330 per person, per year, or somewhat over $1,320 for a family of four, was expended on personal health care in 1973.[3] Regrettably, about 95 cents of every dollar is spent on curative care. More about this later.

Universal health insurance has removed financial impediments to health care on the part of patients, but does not remove psychological impediments to change or innovation on the part of physicians as providers. The need for the type of organization known as the community health center, which can place emphasis on the promotion and protection of health, and can be organized to deal with psychosocial as well as physical illness, has become apparent to growing numbers of Canadian health workers, but problems of satisfactorily working out mechanisms acceptable to physicians have not yet been resolved. The Province of Quebec has enacted a Health Services and Social Services Act (1971) which is leading towards establishment of a network of local community service centers responsible for integrating primary care services. Although too early to evaluate the system, the intent is to provide a level of services which are eventually to become the main form of entry into the health system. Legislation has been passed to finance capital construction, and priority is being given to underprivileged areas initially in terms of available services. Management of these centers is by a nine-member board of administrators. Five board members are elected by users of the center, two represent different socioeconomic groups in the community, and are nominated by government, one member represents professionals practicing in the center, and one represents the nonprofessional personnel. Staffs

of the centers are multidisciplinary. Quebec's experiment is being watched with interest by other provinces.

Several Canadian provinces have begun insurance coverage for dental prevention and treatment, and for pharmaceutical benefits. These programs are restricted to certain age-groups, the dental plans for children and the pharmaceutical plans for those over 65; nonetheless, they are universal for all qualifying residents regardless of income, education, or social class. These programs may well be the forerunners for national denticare or pharmacare programs.

It is important to emphasize that there is not one hospital and health insurance plan in Canada. There are 10 provincial plans with a federal cost-sharing program. Constitutionally, in Canada, health care is a provincial jurisdiction, or "states right." The federal government can encourage, but not command, in this sector.

Federal-provincial hospital and health insurance schemes have been in operation now for five years at minimum. Prior to their implementation in Canada, the training of physicians and nurses, the means of payment, conditions of practice, facilities, standards, and procedures, as well as costs, were similar to those of the U.S. If Canada's programs and experience are viewed as a large field experiment, a number of suggestive conclusions can be reached.[4,5] In relation to the structure and pattern of medical care, in retrospect, Canadian national health insurance was not designed to change basic patterns in the provision of care. It has not made a significant impact in this regard. It has removed financial obstacles to medical care for virtually all of Canada's people, and has removed the threat of economic disaster experienced by U.S. families when catastrophic illness occurs in a family member. Equality of access to physician and hospital care has improved greatly, and there is some evidence that the poor seek medical help earlier and more often. Those of a politically conservative persuasion predicted catastrophic consequences for physicians, hospitals, and the federal treasury. They predicted an overwhelming demand for services and facilities, and that personnel would be unable to meet the demand. This has not in fact happened. As expected, there have been increased costs and pressures for new resources. With the inflationary spiral, the increase in costs has paralleled the U.S. experience in a remarkably isomorphic way.

Increasing equity through removing financial barriers has not solved all problems of access for patients. Cultural barriers, ethnic beliefs, and a variety of unidentified variables have operated to diminish access, and have probably contained costs somewhat.

Physicians are no longer restrained from choosing poor rural or remote areas in which to practice because of a lack of effective economic demand. Removal of financial barriers has not resulted in a significant change in preferred geographic locations for practice in other countries, however, and in comparative terms this is not surprising. Something of interest which has happened, however, is that there has been a slowing down of the tendency for young physicians to elect specialization, and there is a discernible tendency towards greater interest in family practice and primary care.

Although Canadians are strongly in favor of, and believe in, the necessity and desirability of national health insurance in 1975, it is obvious that it has not of itself changed the structure or the organization of medical and health care. Generally, the schemes have operated on a fee-for-service basis, and there has been little incentive for hospitals or physicians for either cost containment or innovations, such as health maintenance organizations, community health centers, or improved methods of delivering care combining purely medical with psychosocial approaches. There has been little reinforcement of greater attention to prevention, promotion, or protection, or greater interest on the part of health professionals in environmental or pathogenic life-style modification. Quebec's program is an unevaluated exception.

While not belittling gains that can be made by removing financial barriers to medical and hospital care, it seems clear that removal of economic impediments is only a first, though desirable, step. The next challenge is rethinking the structure and pattern of medical care, developing and testing mechanisms for implementation and payment of improved health care organization, and to provide incentives for professionals and patients alike to accept and utilize improved arrangements. The modern epidemics of heart disease, hypertension and stroke, of respiratory disease, arthritis and mental illness are not likely to be attenuated through secondary and tertiary medical care, as presently available. Even reorganized primary care, for that matter, without a profound reorientation of providers, facilities and priorities, will not affect national health status greatly. Alternative approaches and a major reconception of the health enterprise are urgently needed. While true changes in health care organization can yield arithmetic increases in health status at geometric increases in cost, the obvious is slowly becoming evident, namely, that we have been putting large amounts of money on the wrong things (in terms of effectiveness) and smaller amounts of funds and resources on the right things. With

payment for medical care on the insurance principle and a growing recognition that health problems of urban populations are not only the result of the inability of the urban poor to pay for health care, the realization has grown in Canadian government circles that a fresh look is needed at established health policy.

In recent years, the Long Range Health Planning Branch of the Department of National Health and Welfare of the Government of Canada carried out an analysis in which principal causes of sickness and death were studied. In examining mortality, morbidity, and other health indices, it became evident that a new perspective on health was needed. By laying aside jurisdictional, institutional, and human resource issues, and taking a fresh view, the Health Field Concept was developed by LaFramboise and his staff[6] in 1972-73. This approach has since been elaborated by Lalonde[7] and is being used as a basis for further study and for federal government policy planning. A presentation of the Health Field Concept was made to the World Health Assembly in 1973. Western countries of Europe which have had national health insurance schemes for decades found it of interest, and I have seen copies of this schematic in the offices of health researchers in the U.S. in recent months.

I would like to present the concept to you in abbreviated form. The Health Field Concept is a conceptual framework composed of four principal elements. The first of these elements is human biology. The human body is complex, and there is much that can go wrong with its component systems. Human biology as an element embraces all aspects of health related to the body as a function of man's basic, intrinsic biological makeup. Internal body systems, such as the skeletal, muscular, genetic, nervous, cardiovascular, and endocrine, are included, as are processes of maturation and aging.

The second element is the environment. Conditions outside the human body which affect it, and over which the individual has little or no control, are subsumed under this element. Individuals have little control over, and often can do little to protect themselves against, or even have knowledge of, unsafe, contaminated or chemically adulterated foods, cosmetics, or drugs. Tempos and pressures of modern life are also often beyond the control of the individual. Crowding, high-rise living, lack of privacy and other facets of modern urban life also form a part of the environmental element.

A third element of the concept is life-style. Life-style refers to individual and collective decisions taken

by individuals that affect their health. These involve matters over which the individual has some degree of control. Self-imposed risks often result from decisions, actions, and habits that have an adverse effect on health. Cirrhosis of the liver is a disease of heavy drinkers, lung cancer is a disease of heavy smokers, venereal disease is often related to promiscuity and, in one sense, all can be said to be "diseases-of-choice." When self-imposed risks are taken by individuals repeatedly, and these behaviors result in illness, it is reasonable to label the resultant illness a "disease-of-choice."

The fourth element in the Health Field Concept has been conceptualized as health care organization. Medical care units such as hospitals, nursing, extended care facilities, public and community health care services, ambulances, dental treatment, health personnel and services are all included. What has generally been called the health care system is included. As mentioned above, this element consumes over ninety-five cents out of every dollar spent on health in Canada.

When we examine the causes of illness and death in Canada, in the light of the four elements above, a very interesting fact emerges. A major part of the illness and death in Canada are from events associated with human biology, environment and life-style factors, whereas the bulk of resources are currently being spent on the health care organization element. Many health problems in Canada are, in fact, "diseases-of-choice," "diseases-of-neglect," or "diseases-of-affluence," and preventive measures exist which could be applied without excessive difficulty. We spend more than half our money treating diseases that might have been prevented. It is true the North American concept of freedom includes the notion of choice. Figuratively, we often invite our colleagues and friends to "choose their own brand of poison," but as it turns out, literally, many of us spend considerable time doing just that.

Changing environment, modifying life-style and improving our knowledge of human biology, on balance, seem more promising avenues of health improvement than endlessly escalating the scale of resources which go into health care organization. In agriculture, we accept that the optimal health of living things is determined largely by measures directed to populations rather than individuals, but we seem to resist this notion for human well-being. To be sure, preventive medicine as now conceived is not going to solve our problems. Pills and injections have limited value in keeping us well. McKeown[8] puts it simply but elegantly:

"...the requirements for human health can be stated simply. Those fortunate enough to be born free of significant congenital disease or disability will remain well if certain conditions are met. There are three basic needs: they must be adequately fed; they must be protected from a wide range of hazards in the physical environment; and they must not depart radically from the pattern of personal behaviour under which man evolved (for example, by smoking, overeating, or sedentary living)."

A further illustration of McKeown's contentions is given by Hubbard[9] on the actuarial consequences of obesity, clearly a "disease-of-choice, affluence, or neglect."

"It has been reliably estimated that if obese individuals were reduced to ideal weight, the average life expectancy would increase by seven years or more. The significance of this is illuminated when one calculates that if all forms of cancer were to be removed, the average life expectancy of the people of the United States would increase only by two or three years. It is also assuredly true that there are many more years of life wasted because of obesity than are wasted because of undernutrition."

Those of us who attended the NCIH Conference in 1974 heard Denis Burkitt[10] persuasively correlate a number of illnesses with fiber-deficient diets high in refined and processed foods. This diet involves both an environmental element (availability) and a life-style element (choice). When one examines obesity, fiber-deficient diets, smoking and a number of other similar variables as predisposing conditions to illness, the self-imposed nature of a number of "diseases-of-choice" as a consequence of life-style become alarmingly evident.

The Canadian Minister of Health, Mr. Marc Lalonde, has affirmed that the government must turn greater attention to improving knowledge of human biology, moderating environmental influences and encouraging the modification of individual life-styles. After assessing premature death and disability in Canada, it was his contention that a meaningful measure to employ would be the number of years of potential life lost when death occurs before normal life expectancy has been attained.

Using this measure and 1971 Canadian data, early death from heart disease was found to have caused loss of 350,000 years of potential life. When predisposing factors were examined, variables such as obesity, lack of exercise, smoking and stress were found to play important roles. Each of these conditions derives from "choices," or life-style elements, in combination with environmental factors.

Following heart disease, motor vehicle accidents, with loss of 250,000 years of potential life, ranked high on the list. Human judgment, driving habits and personal attributes were estimated to account for 80% of motor vehicle accidents. Such aspects as driving after alcohol consumption, failure to use seat belts, aggressive, competitive, and suicidal motor vehicle operation were all included. Twenty percent of accidents resulted from environmental factors, however. Poor roads, mechanical failures, faulty vehicle design and other factors are mostly beyond the control of the individual. To quote Lalonde, "....It is hard to know how to categorize the Great God Car, especially here in North America. It is a dominant factor in both our environment and style of life."

Third largest cause of death in Canada in 1971 were other accidents, in the home, at work, and at play. These cost some 200,000 potential years of life.

Lung cancer was another important cause of death among men between 50 and 70 years of age. Approximately 15 percent of all male deaths after 40 are due to lung cancer and other respiratory diseases. The relationship between these diseases and smoking are well known to a group such as this. Dr. Thomas McKeown, Professor of Social Medicine at Birmingham, has written[8] that moderate or heavy smokers would live longer by giving up both doctors and smoking than by retaining both.

Compared with what can be done by modification of life-style and environment, the health care system with all its hospitals, specialists and facilities is relatively helpless to reduce the number of early deaths from the sorts of illness we have been discussing. Even where secondary care can assist, it can only give care and not cure in most instances. It cannot prevent, but, at best, hopes for partial restoration of function or rehabilitation.

None of the foregoing is an argument for dismantling health care systems or neglecting to improve health care organization. There is much to be done to rationalize, modify, and improve our health institutions and systems. A reordering of priorities and expenditures, recognition that reallocation of health care tasks of health care personnel can lead to lower costs per unit of service without significant loss in safety or increase in risk, and other needed changes in systems and financing are patently obvious to those associated with health care. I have concentrated, nonetheless, on issues which, although recognizable, tend to be minimized.

Ultimately we are each responsible for our own health.

For this reason primary responsibility for health must be taken out of the hands of the professional worker and given back to the individual. To the degree that we feel we may live as we wish, without concern for consequences, and, when health fails, deliver ourselves to professionals, passing to them responsibility for our care, cure, and restoration, we live in a delusional state.

For this student of international health, certain regularities have emerged in the historical tapestry of development. As urbanization and economic development occurs, societies trade infectious and communicable disease mortality for chronic degenerative disease and mental illness. Average age of the population and life expectancy increase. Mortality patterns change, and the balance of loss of life shifts from childhood to adults in productive years, with concomitant increases in coronary artery disease, other cardiovascular conditions, and neoplastic and mental illness. Motor vehicle deaths become epidemic, and geriatric conditions increase.

Clearly a major effect of improved health status from the point of view of the individual, or the nation, is to "buy time." Regrettably, man's years are numbered in any event. To "buy time," therefore, represents a real and tangible accomplishment. The challenge to health workers, and those concerned with the national quality of life, is facilitating emergence of a milieu in which the greatest possible number of those living are enabled to live out their years in the healthiest, most productive, and satisfying manner possible.

The view from a Canadian window suggests improved urban health status requires going well beyond health insurance and well beyond problems of health care organization, even though these are needed first steps. It suggests we must put greater emphasis on programs which affect large numbers, and less on approaches which primarily focus on physical or chemical manipulation of individuals after the fact for restorative purposes. Somehow, we must care more for individuals by giving greater attention to populations and the environment. We must reexamine present priorities thoughtfully and imaginatively, and begin an evolutionary reallocation of funds, personnel, and resources towards programs which satisfy the tough, but realistic, criterion of effectiveness. The terminal objective of greater health and well-being and improved national health status can be brought about by a philosophy of "more of the same," but increasingly our present mechanisms are becoming not only excessively costly, but anachronistic as well. The need

is not only for new money, but for a thoughtful questioning of our basic assumptions as well. The journey of a thousand miles begins with a single step...

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The large-scale migration of American Indians to the cities is a quite recent phenomenon. For some forty years, Navajos have been migrating to the San Francisco Bay Area as cheap labor for such organizations as the Santa Fe Railroad Company. Not until World War II brought opportunities in war-related industries, however, did significant numbers of Indians come to the Bay Area (Willard, 1964). Those Indians in the city during the forties, however, either were not recorded as such, or subsequently returned to the reservation, probably for lack of employment opportunities, for they were neither union members nor very skilled. However, between 1952 and 1968, about 200,000 of the roughly 600,000 Indians in the country migrated to urban settings (Bahr, et al., 1972). Over half moved on their own; the rest came on either of two BIA relocation programs: (1) a direct employment program that relocated 67,522 individuals bewteen 1952 and 1968; (2) an adult vocational training program that relocated 30,047 individuals between 1962 and 1968 (there are two relocation centers in the Bay Area: in Alameda and San Jose). In 1960 the Indian population was 551,655, 26 percent of it off-reservation urban Indians; in 1970 it was 827,982, 45 percent of it off-reservation urban (Sclar, 1972). Census data for California show 39,014 Indians in 1960, and 91,018 in 1970, with only 6 percent on the reservation. A recent 1975 estimate puts the California Indian population at 180,000 (unpublished report to the governor).

This dramatic rise in population makes even more pressing the need to get reliable data on the demographic and socioeconomic characteristics of the urban Indian population. Neither the BIA (Ablon, 1964), nor the U.S. Public Health Service (PHS, 1971) can provide accurate figures on the number of Indians living in the cities. The PHS, which provides health care to reservation Indians, has not provided any care to Indians who cannot make it to the reservation, although this policy is challenged by many groups and may change (Sclar, 1972). Official estimates regularly undercount the Indian population, and differ widely among themselves. The 1970 census shows a total of 12,636 in the three Bay Area counties which we surveyed. Our population frame shows about 19,000 in those three counties. There are a number of reasons for these discrepancies. The census often counts Indians as white, or simply as non-white, unless they identify themselves or are readily identifiable as

Indians (Steiner, 1968). The Indian population is also very mobile, and thus many of them are missed by the census. The BIA relocates Indians in residences throughout the city and does not keep track of their current addresses; it thus has no accurate figures on how many of this very mobile group are still in the city. To plan effectively for medical services, which this fast growing population needs, we must reverse this official tradition of ignoring and undercounting urban Indians.

One large factor causing the migration to the cities was the BIA attempt, supported by bureaucrats and Congressmen alike, to get Indians off the reservation, give them jobs, and thereby integrate them into the American mainstream. Senator Watkins of Utah: ".... the sooner we can get the Indians into the cities, the sooner the government can get out of the Indian business" (Bahr et al., 1972). However, the BIA program was too small or else unacceptable to many Indians, for almost half came on their own, highlighting the second, more important, factor: the economic conditions on the reservation.

The majority of Indians came to the cities to attempt to improve their economic position. The bitter truth is that even their current position as urban poor is quite an improvement over the reservation situation, for economic conditions on the reservation are, quite simply, disastrous. The unemployment rate ranges from 60 to 75 percent; the median income for Indian families is $1,900. Educational facilities, housing, and diet are almost universally substandard, even by local standards. To make matters worse, the reservation population is increasing at a rate twice that for the U.S. as a whole (Jorgenson, 1971; 1972; Sarkin, 1969; USPHS, 1971).

In the U.S., the major centers of political and economic power have increased and concentrated their power, at the expense of the outlying areas. Both government policies and technological advances have contributed to this movement toward bigness. As the concentration has proceeded, it has become increasingly difficult to maintain comparably profitable enterprises in the outlying areas and rural areas, where reservations are, and where they have become relatively depressed, underdeveloped, and oversupplied with labor. White racism toward Indians has kept them out of even these local economic and political systems, except as occasional consumers and as exploited unskilled laborers.

By moving to the city, the Indian can escape to the slightly improved position of poor urban laborer, if he

can find a job. To make this small gain, however, he must sacrifice family and land ties, as well as the few advantageous features of his federal wardship status.

Although Indians do have cultural patterns different from the general population, the study from which I draw was based on the premise that external political and economic factors are more important in determining Indians' patterns of behavior when interacting with structures in the dominant culture. It was not the Indian culture that spurred the Indian movement to urban areas, but rather an economic need to survive.

In moving the reservation to a city, the Indian faces a major change in the sort of medical care system with which he must deal. Anglo medical care on the reservation is provided by the Indian Health Service, a division of the Public Health Service. The care is provided free of charge and Indians are encouraged, indeed, often sought after, to receive care. All care is provided from a single IHS facility on the reservation, and Indians meet relatively few bureaucratic obstacles to getting care. The Indians' cultural background is important to consider when planning effective human service and health care programs, but the main problems Indians face are caused by the external system with which they are forced to interact. For instance, whether or not employment is available determines whether or not Indians will have insurance coverage. In turn, the amount and type of insurance coverage will determine the utilization of health services. In addition, lack of knowledge about urban life-styles and the complexity of institutional arrangements makes it more difficult for Indians to get proper care.

The data for this paper derive from a sample survey that was conducted by the Urban Indian Health Board of San Francisco in 1973. That study was aimed at investigating the problems faced by Native Americans in obtaining health services and documenting their unmet needs.* Household interviews were completed with 277 families, whose names were systematically selected from a list

*The larger study was conducted by the Urban Indian Health Board with funds from DHEW. The major findings of that study were reported in a Ph.D. dissertation, "Health Care Patterns of Urbanized Native Americans," completed in 1974 at the University of Michigan by Michael Fuchs, who also assumed overall responsibility for supervision of the entire project.

containing the names and addresses of 5,000 families who reside in the three counties with the largest Native American population in the San Francisco Bay Area (San Francisco, Alameda and Santa Clara). Substantial efforts had been expended in compiling the list from various sources and by field checking.

The sample is generally comparable to a simple random sample, having one major problem, namely, a high non-response rate. A large number of the families in the sample (140) could not be interviewed because they had moved and left no forwarding address, others because of inaccurate addresses, with nonexistent numbers or streets. Several tracking procedures were attempted, including asking neighbors and mailing forms requesting new address information. Despite all these efforts, this group accounted for 33 percent of the attempted sample and 43 percent of the net eligible sample. It is certain that at least some of the families who could not be located continue to live within the survey area, and, for economic or other reasons, prefer not to be reached, creating at least some, though an indeterminable amount, of bias in the sample. If all those who could not be reached continue to live in the survey area, the completion rate would be 57 percent; if all moved out, the completion rate would be 91 percent.

One major ramification of this loss is a likely underreporting of the practice of traditional Indian medicine. The unreachable segment in the Indian population has probably not established significant roots in the city, and, thus, probably maintains stronger ties with the reservation and the Indian cultural heritage. Thus, they would be more likely to utilize traditional Indian medicine than those who developed more and stronger ties to the larger urban culture, including its medical system. If this conclusion is true, then the data reported are particularly significant, since the actual use of traditional medicine would be even more prevalent than that reported. Another likely result of the low response rate is to represent the Indian population as more stable and socially and economically successful than it is. Many of those who disappear do so for economic reasons: creditors, evictions, job loss, etc. So that those who are left have been, by and large, more successful at fitting into the system, and give a better picture of the social and economic level of the whole population than is accurate.

The study showed that the length of time Indians have lived in an urban area is correlated positively

with having health insurance coverage, and negatively with the use of traditional Indian medicine. The longer Indians live in urban areas, the more they tend to become integrated into the urban patterns of medical care. The explanation is that the constraints of the medical system leave little choice for those seeking security and decent care. Just as for the rest of the American middle class, medical insurance is an economic necessity, for otherwise expensive illness could wipe out their economic basis.

Only 28 per cent of the sample came from California tribes; Navajos made up eight percent and Sioux seven percent. There were 70 tribes represented. Twenty-six percent of the families reported that at least one member came to the Bay Area on a BIA program. This group, as well as others, came to the Bay Area after the mid-1950's.

As the dynamics of the transition would indicate, the Indians living in the Bay Area tend to be younger and better educated than Indians living on the reservations. However, they were also substantially less affluent than the general urban population living in California. Although Native Americans who leave their reservation do increase their chances for employment, the unemployment rate among Indians in the Bay Area was 30 percent; 36 percent of the families reported they had no working members.

Forty-eight percent of the families reported that at least one member had a health problem at the time of the survey. One-third of the population had a self-identified health problem; not all of the people with problems saw a physician within the six months prior to the survey. Twelve percent reported at least one member had difficulty receiving medical care, and the major difficulty was reported to be economic. The rate of hospital admissions for the urban Indian was six percent for six months, which is close to the national average of five to seven percent. Similarly, while 73 percent of a national sample visited a physician at least once a year, 74 percent of the urban Indian sample reported visiting a physician at least once a year. The Indian sample differs significantly from the national sample in the number of physician visits per person per year: 3.2 per individual per year, compared to 5.0 per individual per year for the national sample. Thus, Indians tend to initiate care at a comparable rate, but do not have as many follow-up visits. (National data from U.S. National Health Survey).

Language and tribal grouping were also related to a

family's regular source of care. Families speaking their native language, or from the Plains group, had the highest percentage of families without regular source of care, and a high percentage of families who received care from the OPD and NHC. Families who had members who spoke English, as well as some members who spoke their native language, or families with a non-Indian member had the highest percentage of families who received care from private practitioners. Those families more recently arrived in the city had a larger percentage with no source of care, and more families who received care from the OPD and NHC, than those families who had lived in the city for a longer period of time (Table 1). Length of stay in the city, however, was not significantly related to the number of physician visits. If the assumption that care received from a regular source is of better quality than care received from a variety of sources is true, then the data indicate a positive relationship between length of stay in the city and the quality of medical care received.

Type of third-party coverage was the strongest predictor tested of the family's regular source of medical care (Table 2). It was also confirmed in the study that type of third-party coverage was related to employment status, education and tribal affiliation; however, family income was by far the strongest predictor (Table 3). Families who reported income between $4000-6000 (15 percent of the sample) had the largest proportion of those (40 percent) without third-party coverage. For families in the lowest income group, 46 percent had Medi-Cal coverage and 16 percent had no coverage. Families who received care from the OPD or NHC tended to have Medi-Cal or no coverage at all. The more affluent Indians were similar to the American middle class. Ninety percent of the families with incomes over $6000 had some form of private health insurance, one-third having Kaiser Permanente. Families who received care from private practitioners tended to have Blue Cross/Blue Shield or commercial insurance coverage. Families with no regular source of care usually had Medi-Cal or no third-party coverage, and were unemployed or had a family income of $4000-6000.

Indian people living in urban areas, as those on reservations, seem to underutilize medical services. Although these and other data revealed that Indian people have more illness and have lower life expectancies than the general population, about the same proportion of people (74 percent) as the national average visit a physician once a year. However, the Indian sample

Table 1

REGULAR SOURCE OF MEDICAL CARE BY LENGTH OF STAY IN THE CITY

SOURCE OF MEDICAL CARE	LENGTH OF STAY						
	Up to 1 year	1 - 3 years	3 - 7 years	OVER 7 years	TOTAL	OVERALL	CASES
OPD	11[2] %	8 %	18 %	63 %	100 %	14 %	37
Private	1	10	14	75	100	35	96
Kaiser	0	15	28	57	100	15	40
NHC	14[2]	23	18	45	100	8	22
Mixed	0	0	50	50	100	4	10
Mixed-no source	3	22	22	53	100	13	35
No source	15[1]	9	35	41	100	12	34
						Not Ascertained	2
		$X^2 = 43.311$		$p = .0007$			N = 277

[1]Although this is only 15 percent of those having no source, this 15 percent represents 35 percent of the families in the first year category (5 cases out of 14).

[2]Although the first year makes up only 11 percent and 14 percent of the OPD and NHC sources respectively, they represent 50 percent of all the first year families (7 out of 14).

Table 2

REGULAR SOURCE OF MEDICAL CARE BY KINDS OF THIRD PARTY COVERAGE

Kind of Coverage	REGULAR SOURCE OF MEDICAL CARE									
	OPD	PRIVATE	KAISER	NHC	MIXED	MIXED-NO SOURCE	NO SOURCE	TOTAL	OVERALL	NO. OF CASES
Kaiser	0 %	4 %	83 %	0 %	4 %	2 %	7 %	100 %	17 %	46
Medi-Cal	22	33	0	19	2	7	17	100	20	54
Blue Cross/ Blue Shield	7	66	0	7	10	3	7	100	11	29
Commercial	20	72	0	0	0	4	4	100	17	45
Mixed	8	28	4	4	12	28	16	100	9	25
Mixed-no coverage	16	28	2	2	2	39	11	100	16	44
No coverage	13	17	0	24	0	13	33	100	11	30
								Not ascertained		4
										N = 277

$X^2 = 318.58$ p = 0.

	Kinds of Insurance	Source	Combined
Goodman Kruskal Lambda	.3105	.2584	.2872

Table 3

TYPE OF THIRD PARTY COVERAGE BY FAMILY INCOME

INCOME	TYPE OF THIRD PARTY COVERAGE									
	KAISER	MEDI-CAL	BLUE CROSS BLUE SHIELD	COMMER-CIAL	MIXED	MIXED NO	NO COV-ERAGE	TOTAL	OVERALL	CASES
0-2000	3 %	46 %	3 %	5 %	16 %	11 %	16 %	100 %	14 %	37
2000-4000	7	46	0	2	15	15	15	100	18	46
4000-6000	2	21	8	17	7	24	21	100	16	42
6000-8000	40	0	15	15	5	10	15	100	8	20
8000-10,000	21	4	18	36	7	14	0	100	11	28
10,000-11,000	33	0	17	17	11	22	0	100	7	18
Over 11,000	30	0	20	24	6	16	4	100	27	70
								Not Ascertained		16
										N = 277

$X^2 = 140.32$ p = .0000

	Kinds of Insurance	Income	Combined
Goodman Kruskal Lambda	.2113	.1571	.1856

reports fewer physician visits per person per year. This data suggest that urban Indians may not be getting as much medical care as they should. Indian people are sicker than most Americans, as Indian Health Service data shows, and yet the population in urban areas tends to make fewer doctor visits per year. Whether Indian people are "turned off" by the medical care system after a first contact, or whether the urban Indian is that much healthier and doesn't require much follow-up, cannot be determined by this study. It is felt that urban Indians can get access to care when needed in the Bay Area, but that whether this is a regular source comparable to what most Americans get will depend on income and job more than any other factor.

For Native Americans there are two other possible sources of care not available to the general public: Indian Health Service on the reservations and traditional Indian medicine on the reservation or in the city. How important are these as sources of care for the urban Indian population?

Families from all tribal groups ranked different types of traditional medicine in a similar order, but the magnitude of the use varied greatly. Families from the Southwest reported the most use of traditional medicine. Traditional medicine did not replace Anglo medicine, but was considered supplemental to it; the presence of a health problem prompted families to seek out both kinds of medicine. Indians perceive Anglo medical care as a means to deal with symptoms of illness, and perceive traditional medicine as a way to treat the causes of illness, based on their religious beliefs. Further, it was confirmed that success in the city as indicated by higher education, high income, automobile and home ownership were not important predictors of the use of traditional medicine. Indians in both the high and low income brackets used traditional medicine. Certain cultural factors, such as tribal language proficiency friendship patterns, and length of time in the city, did relate to the use of traditional medicine.

It would seem to be important when planning service for urban populations to take into consideration the use of traditional medicine, and, where possible, to incorporate these traditional services with the modern or Western-oriented medical care. This is not always an easy task, as each tribe has its special ways, and what is good for one group may not work for the others. The fact is that any urban health service dealing with recent migrants from tribal or reservation settings must be

aware of these tradtional beliefs and patterns and develop medical services comparable with these.

It was confirmed, based on comparison with IHS data, that reservation Indians used more Anglo medical services than did urban Indians, as measured by contacts with a physician during the year. The figures from the Indian Health Service for fiscal year 1973 show that there were 1,719,645 outpatient visits, including visits to the Public Health Service Hospital clinics, Indian Health Centers, satellite field clinics, and visits to contract physicians, or 4.1 visits per person.* This figure is higher than the 3.6 visits per individual per family reported in this study. The comprehensive medical care available on reservations might be an important incentive for urban Indians to return to their reservations when they are ill. In fact, only 13 percent of the families reported that at least one member returned to the reservation for medical care. This represented seven percent of the individuals in the survey, and half of those individuals had made the return visit within the year prior to the survey. Although this is a small percentage, as many as 14,000 urban Indians might return each year to reservations for medical care if the trend were true nationally. Since the survey site of this study is 500 miles from the closest PHS-IHS facility, the actual number of Indians who return may be underestimated by these data. Most urban Indians live in cities close to a reservation, and many of the less stable families not located in this study, who move between the city and the reservation, would be more likely to use medical care services on the reservation. Close physical proximity to a reservation was correlated to returns for medical care. Families from the Southwest used more Anglo medical services and returned to reservations in the Phoenix area of the Indian Health Service. Other tribal groups used less services, and returning to their reservations in other areas required more traveling.

Length of time off the reservation was found to be an important determinant of returns to the reservation for

*These data are from a private communication with Mozart Spector, Director, Office of Program Statistics, U.S. Department of Health, Education and Welfare, Public Health Service/Indian Health Service. They are for all IHS areas. The rates varied from 2.4 visits per person in the Oklahoma area to 6.3 visits in the Billings area.

medical care. Sixty-two percent of the families who returned for medical care left the reservation since 1960, and this group constitutes only 37 percent of the total population. Length of stay in the city also relates to the number of women who return to the reservation for pregnancy care: families who arrived recently in the city are more likely to have women who return to the reservation for prenatal care and delivery. The longer Indians reside in the city, the more they will utilize local services and not return to the reservation. The implication of this finding for urban Indians and health planners cannot be overstated. Few women in the study returned to the reservation for prenatal care or for delivery; only five percent of the women had their babies on the reservation. However, even if only three percent of the mothers return nationally for prenatal care each year, the Indian Health Service would have to handle 2,000 women from urban areas returning to PHS facilities for care.

In general, data gathered here do not support the contention that health problems, cost of care or insurance barriers cause people to return to the reservation for medical care. Distance from the reservation seems to be a significant deterrent, and the delivery of health services to these Native Americans remains the responsibility of systems in the area where they have relocated.

In conclusion, problems faced by urban American Indians are similar in many ways to those faced by other urban dwellers in developing areas. The basic reason for their migration to urban areas is the same--to improve their place in life, both economically and socially. In many cases its a necessity if one is to have any chance of finding work. In both the American Indian and other urban immigrant groups, we find that it is the better educated, younger segment which is moving into the cities. In both cases the medical care available is usually provided in a more complex setting in urban areas; the care tends to be less personal and more difficult to understand; language and other cultural problems can add barriers to receiving care. Financing care may also be more difficult than in the native rural setting and may be dependent on wage income; since many employers have some insurance for employees in the U.S. and in developing countries, wages provide necessary means to buy care otherwise not available.

Traditional medicine is also not always available in urban areas and this causes people to return home when ill. Although the urban Indian population did return to

the reservation when ill, this was not in the large number the author expected, and it is probably more prevalent in developing areas. Support by the family and culture when illness strikes is vital, and it should be safe to hypothesize that illness in traditional cultures causes return by individuals to family and familiar surroundings.

One of the major differences between this urban American Indian population and most developing urban populations is that in the San Francisco Bay Area, medical care is available in higher quantity and quality than is avaliable in most developing areas; it could not be shown that large segments of the urban Indian population couldn't get care when it was needed. Also, the housing situation for most urban Indians is better than what they left on the reservations; this may not be the case in most developing areas where poor sanitation is a major urban health problem. Recently, the U.S. Federal Government made an attempt to give small grants or contracts to urban Indian groups to enable them to organize their own programs in order to overcome the barriers mentioned above. In most developing counties, money for this type of grant is not available, and, even when the money is available, the necessary trained medical personnel cannot be found.

It is important, however, to document the problems faced by urban migrants in order for us to understand them. Survey research can be done, although difficult among such a mobile population, and should be encouraged as a means for collecting information about health needs and behavior, and in order to give health planners knowledge of the extent of migration.

It is recommended that government specifically provide for this migrant population, services that are sensitive and responsive to both their cultures and their health needs. This could include the following:

(a) Preparing resource or referral books that recent migrants can consult when medical care is needed. This book should include descriptions of kinds of insurance coverage, eligibility requirements for medical care of various facilities, different sources of care available, and a listing of organizations in the area serving the specific migrant group.

(b) The government should support migrant activities in urban areas so that services can be developed to meet their special needs. The government should provide funds to encourage the development of outreach, referral and social services that have not been covered by regular medical care.

programs. Funds should encourage the establishment of clinics where needed to meet special cultural and health needs.

(c) The government should encourage health manpower training in urban areas. Support for scholarships and stipends should be made available to recent migrants interested in entering the health field. Many young migrants are proud of their heritage and would be eager to enter a profession to help their people, both in cities and in rural areas.

(d) Also, in the U.S., specifically, there should be a health insurance program that is more universal and provides equal coverage to all in whatever state or city the patient is living. If urban Indians had access to both Indian Health Service care on reservations and a good health insurance program that would buy medical care in the urban areas, some of the access problems could be solved. It would certainly encourage a more regular source of medical care, according to the data in this study.

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NICHOLAS CUNNINGHAM

It is likely that MCH services will assume prime importance in most basic health care programs in developing areas. There is intense discussion of the role of health professionals in such services; at least equally important is the person who will have to do most of the work, the primary MCH health worker. What are some of the issues which will determine the effectiveness of this worker in rural and urban settings?

So far as one can generalize, the most important functions of this worker will be to:

1. Know the dimensions of the target population and be in touch with it.
2. Identify the health and health-related needs of mothers and children.
3. Support and educate mothers so as to increase their health maintaining capabilities.
4. Assess need priorities and health resources and bring them together intelligently.
5. Find high-risk mothers and children and obtain and maintain their trust.
6. Bring these mothers and children into the health care system and help the system respond to their needs.
7. Help other family members as training and time permits.

Several key issues will be involved in this person's ability to do these jobs, these may be summarized as follows:

1. For whom does (s)he work? The answer will affect selection, supervison and reimbursement.
2. How long will (s)he work? This will depend on the above, but also on the type, length and site of training and on how much (s)he enjoys the work environment.
3. Whither will (s)he go in career terms? This will affect selection, training and job commitment.

The resolution of these issues will, however, depend largely on the environment in which the worker will live and work. What will be some of the important discrepancies between country and town or city as they affect the work of the primary MCH worker?

Factors Affecting MCH Primary Health Worker	Country	City
Variability of populations to be served	limited	more extensive
Visibility of target populations	good	often obscure
Dimensions and variability of health care needs	limited	more extensive
Community knowledge required	extensive	less extensive
Technical skills required	limited	more extensive
Health Care system knowledge required	limited	extensive
Visibility of high risk cases	good	often obscure
Family resources usually available to help	extensive	limited
Acceptance of new worker	slow	faster
Time needed for attitude changes in population	long	shorter

Let us now look at the three issues previously raised.

1. For whom will (s)he work? It seems clear that the rural worker, to be effective, will have to:
   (a) be a person not only acceptable but respected by the target population and its leaders,
   (b) have extensive knowledge of the local culture,
   (c) be trainable as a health worker.

This strongly implies nomination by the community, and then selection on the basis of trainability (by some index such as the Raven Matrices) and acceptability to the health care system.

Reimbursement, while probably mostly from the health care system, should probably include a local authority or community-based contribution. And supervision should include some feedback measure of continuing community support.

For the urban or peripheral urban worker, with the more extensive training required, and the more ready acceptance of a qualified worker by the more varied population, it will probably be desirable for the health care system to nominate the workers, with the selective and supervisory contributions of the community varying according to the degree of political organization.

How supervision is provided is often a complex problem, since the worker frequently finds himself responding not only to the needs of a heterogeneous community, but also to a variety of providers, including a doctor, a nurse or health superintendant, or, in the case of demonstration projects, to researchers as well. Since the worker frequently ends up serving as both a patient or community advocate and a health system facilitator, (s)he will have to possess or acquire considerable skill to satisfy the needs of both consumers and providers. In any case, where the worker is part of a team, it is usually advisable to separate medical from administrative supervision. The contribution of the community to salary, and hence tenure, will usually be negotiated, depending on the strength of the community.

2. How long will (s)he work? It takes a long time to know a rural area and even longer to gain acceptance there. Change is slow, and if the worker is to reap any harvest, (s)he must understand and enjoy the environment. It seems obvious, then, that (s)he should stay, and more important, want to stay for at least 3 years and preferably 5 or 10. This means that knowledge of, and trust from, the community is of paramount importance and that literacy, or a medical background (such as malaria work), while perhaps desirable, is secondary. If this is accepted, it seems clear not only that the worker has to be from the area, but that (s)he must remain part of it throughout any training process. Training in towns or urban areas for more than a few months at a time is probably the most effective way of changing a village worker to something else, i.e., untraining him or her for village work. Forcing anyone to do rural work by contract, "hardship" inducements or in the name of qualifications, may provide a body, but rarely a useful one--at least for primary care.

For the urban worker, it is not clear, at least to me, what the optimal term of service is likely to be, but the rough index of job satisfaction would seem equally useful. Perhaps "outsiders" will not only be more acceptable (from the point of view of factional allegiance and medical confidentiality), but more willing to stay and

work than insiders, who are more susceptible to local pressures. Training again should be community based, but since the worker is already urbanized, the periods of training can be longer, as is usually required for more technical content. Ability to work in a team, as well as positive attitudes towards the consumer population, will be necessary selection criteria if the worker is to enjoy the work and last long enough to justify the training provided.

3. The question of whither? This provokes perhaps the biggest dichotomy between country and city. If the rural community is to survive, it must be able to hold on to its leaders and providers. Since most of us see provision of health as one of the crucial ingredients of community development, the primary health worker must find increasing rewards and prestige locally for each period of effective service. This, in fact, tends to happen, but can be enhanced by health care system awareness of the benefits and appropriate awards, both honorary and monetary. It is not, however, enhanced by further extensive training to the point that the worker is either overtrained or overpaid for the rural job (except in special cases of outstanding leadership or intellectual drive).

For the urban worker the situation is far less clear. There is less likely to be local prestige attached to long faithful service, while the pathway into the urban care system is usually an obstacle course of professional qualifications, union rules, civil service requirements and local politics. Primary care systems are poorly developed and underfunded. Career ladders have rarely been established. On the other hand, a variety of technical career ladders in the more prestigious secondary and tertiary care facilities are often available. Since the community itself may be changing rapidly, it is perhaps unrealistic to expect the workers to identify permanently with either that particular community or primary care itself.

It is possible that, with the organization of these workers in professional associations, and perhaps with the stabilization and then the development of these communities, careers may develop that are built on the experiential skills and community advocacy that is so much needed in primary care.

In conclusion, it seems desirable that we recognize the substantially different kinds of primary health care workers needed in rural and urban areas, that we learn much more about what kinds of persons are likely to enjoy this kind of work and how to select, train and support these indispensable primary caretakers in both bush and boom town.

GERTRUDE ISAACS

The assumption that urban and rural areas need different systems of health care is meaningless. Basically, their health needs are the same, e.g., nutritional, physiological, psychological, environmental and social needs, such as family and community. Of particular importance is the need for a health care system within the context of the community. Each area suffers similarly from inaccessibility to care and inability to pay for the costs of such care. These problems are more closely related (1) to economic and political issues of poverty rather than to health issues, and (2) to the lack of an identified system for health care. This situation is aggravated by the demands for curative care of the more affluent and socially sophisticated, which society in general cannot afford. These issues were well addressed in the World Bank Health Sector Policy Paper, and have been confirmed over and over again in practice.

Solutions to these problems, however, remain elusive. Traditional health care services have been designed to provide curative care in urban and rural areas alike. Preventive care has been provided separately or not at all. The mutual needs of both groups for preventive care has been ignored for the most part. Organized medicine, organized nursing and governmental agencies have been slow to accept a primary health care system, which combines preventive and curative care at a very basic level. This has created a major dilemma for innovative primary health care models in Western societies.

Fifty years ago, the Frontier Nursing Service (FNS) established a district health care system. It later added a primary care training program to demonstrate methods for overcoming health care problems in rural America. A highly inaccessible poverty-stricken rural area with no physicians was selected, under the assumption that if the methods were

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demonstrated to be successful in such an area, they might be chosen to be used in other areas also. Because of limited availability of medical services, heavy emphasis was placed on preventive-oriented primary health care, with the focus on mother and child care. A workable system of family care evolved, and has been maintained continuously at relatively low cost. The source of payment, which is largely an economic and a policy issue, remains a problem.

The system consists of a centrally located hospital and health facility encircled by eight nursing districts located in the community serviced. Through this system, until 1975, roughly 30 percent of the care was given in the home, 30 percent in the nursing district clinics, and 40 percent in the hospital and health facilities. Medical backup and other curative services are supplied through the hospital and health center. Specialty care is provided through linkages with state and regional medical centers and institutions. All are administered within one organizational structure, which includes research activities and health manpower training.

Experience at FNS, and the data that follows, both illustrate (1) the importance of preventive care in the interest of reducing costs, and (2) the constraining influence of governmental regulations and its policy for reimbursement of the provision of health care. Reimbursement is made for medical care only. FNS has demonstrated unequivocally that primary care services delivered by family nurse-midwives (primary care nurses) through a district system markedly reduce health care costs. The lives of many mothers and children are saved, and the hospitalization of all age-groups, particularly the chronically ill and the 65-and-over age-group, is lessened significantly. Yet the government offers no reimbursement for preventive care.

The system of health care is based on the premise (1) that primary care requires a well trained, but not necessarily a highly trained, individual; (2) that health teaching and counselling, with supportive care, plays an influential role in helping families to establish sound health practices and to cope with day-to-day health problems, thus lessening the need for costly curative care, and (3) that health care begins with the family in the home. Health care centers are important adjuncts, but they cannot satisfactorily replace home care. Some will argue that home care is too expensive and time consuming, before giving adequate consideration to the potential role of the primary care nurse or the homemaker in providing home health services. Consideration should be given to the importance of

the personal touch provided through this system. Health care is seen primarily as highly skilled medical services which focus on diagnosis and treatment of illness, with minimal attention to health care management and management of illness. I was amazed with the failure of the writers of the World Bank Health Sector Policy Report to mention as vital health issues (1) the midwife, and (2) the importance of the preservation of food. Is this omission due to the lack of the woman's touch in health planning? Or is it because she has never been fully accepted in the American culture? In 1972, 2,000 midwives at the International Midwifery Conference in Washington, D.C., represented 100 countries. The omission from such a report of midwives as a vital cadre of readily available, trained health manpower, was shocking.

A study undertaken by the Metropolitan Life Insurance Company points out the importance of the service provided by nurse-midwives. Metropolitan Life, in 1932, offered this report on the first thousand babies delivered by the Frontier Nurses: "That study shows conclusively what has in fact been demonstrated before, that the type of service rendered by the Frontier Nurse safeguards the life of mother and babe. If such service were available to the country generally, there would be a saving of 10,000 mother's lives a year in the United States, there would be 30,000 less stillbirths and 30,000 more children alive at the end of the first month of life."

In 1954, they reported on the first 10,000 babies delivered by FNS. The majority of these babies were delivered in the home. During this period, FNS lost 11 mothers. National averages during this period were reduced from 64.7 to 7.5 per 10,000 live births. At midpoint in 1937, the national average was 48.9 maternal deaths per 10,000 deliveries. Two FNS deaths were due to non-puerperal causes (pneumonia), two due to joint causes (cardiac and pregnancy), and seven due to puerperal causes. Only three mothers died in their homes. All three were due to postpartum hemorrhage, and they occurred during the days when the nurse-midwives rode horseback and had no telephone or radio communication with hospital facilities. Ninety-three percent of all mothers were delivered by nurse-midwives. A physician was available for the management of abnormalities. No maternal death has occurred in over 8,000 deliveries since 1951. This is substantially below the national average, which has been reduced from 7.5 to 2.5 maternal deaths per 10,000 births.

From 1965 to 1970, the FNS neonatal mortality rate was 13.8 and the stillbirth rate was 10.1 per 1,000 deliv-

eries. Between February 1973 and July 1975, an intensive study of inpatient and outpatient statistical data was conducted at FNS, showing that only two neonatal deaths and four stillbirths had occurred in 495 deliveries, a neonatal death rate of 4.1 and stillbirth rate of 8.1 per 1,000 live births. In 1973, the neonatal death rate was 12.3 and the stillbirth rate was 13.3 per 1,000 live births in Kentucky.

The continued reduction in neonatal and maternal deaths can be attributed, no doubt, to the immunological programs and the family planning program, both preventive programs conducted by family nurse-midwives. Ninety percent of parents now limit their family size to three children or less. No rubella or rubeola epidemic occurred during this period. Better nutrition, in which nurse-midwives play a counselling role, is an important factor, also. Still the nurse-midwife/physician team is only marginally accepted in this country, and the FNS midwifery program is just one of several similarly successful programs in this country and abroad.

The full impact of such care is felt throughout the life cycle -- first in the life of the child, then in the life of the family, and in the life of the grandparents. A mother who learns to take care of a child learns to take care of the family. In a recent study repo ted by Dr. Thomas Nuzum, et al., from the University of Kentucky Medical Center, it was found that children delivered by FNS compared favorably nutritionally, developmentally and in health status with a comparable group of children from the Boston, Massachusetts, middle income group. Sixty-nine percent of the population served by FNS was below the poverty level when the study was undertaken.

Why have such findings been ignored for so long by organized medicine, organized nursing and governmental agencies? Why have the people failed to rebel? These are crucial questions which need to be answered with care. The answers will in large measure determine what efforts will be made to move toward a primary health care system.

Health care costs at FNS are substantially below national levels. Until FNS completed its new hospital facilities in February 1975, primary care services were delivered at approximately $100 per individual per annum. This included the costs of the primary care nurse training program and health research. It did not include the costs of patients referred for specialty care services. Approximately 2 percent of the outpatients and hospital inpatients are referred for specialty care. With the building of the new hospital, primary care costs have risen per individual by $70 per annum.

Much of the increase in cost in the annual budget, from $350,000 in 1965 to an estimated $2.5 million in 1975, can be attributed to standards established by the state and federal governments. With the introduction of Medicaid and Medicare, bookkeeping and record keeping were increased at a phenomenal rate. Manpower to operate the Service has been increased from 98 to 215 individuals, without essential increase in the population served. Neither the number of patients seen in ambulatory care clinics nor the number of hospital days substantially changed during this period.

Home deliveries, which are less costly, were generally discontinued in favor of hospital deliveries, without comparable decreases in infant and maternal mortality rates. In addition, FNS was obligated to build costly new hospital facilities to meet governmental regulations, and is required to meet unrealistic health manpower demands. Rural areas have an unduly difficult time recruiting fully qualified lab and x-ray technologists and other medical specialists, which again are more costly. While the more highly trained specialists are desirable for consultation when problems arise, they are not necessary to provide quality day-to-day care. Regulations have been established to meet Harvard, Yale and Hopkins standards, which are suited to highly developed specialty services, but are not practical for day-to-day primary health care in rural areas. The cost benefits derived through Medicaid-Medicare reimbursements, and adherence to established governmental standards, while essential to maintain services in this country, are highly debatable in terms of the outcome of the service provided.

This policy has caused a major shift at FNS from preventive-oriented health care to curative care. Neither the federal nor state systems reimburse for preventive care. Studies illustrate major shifts in the distribution of care since 1965, with the greatest shift occurring after the opening of the new hospital in February, 1975. For a community the size of Leslie County, FNS was obligated to build a 40-bed hospital to meet bed requirements stipulated by governmental agencies. This was done with the expectation that it would be 70 percent occupied within six months, calculated on the basis of the experience in surrounding areas. After eight months, the occupancy remains at 47 percent. On the other hand, outpatient services have shifted from the district health centers to hospital-based facilities. This can be attributed largely to the increase made in charges for health care services in order to meet increased costs incurred by the development of more costly curative services.

A recent study of costs, charges and fees collected since the opening of the new hospital in 1975, indicated a marked change in patterns of health service utilization. It indicated also that the people of the community will pay a limited sum for preventive-oriented services provided through the district centers. Instead, people will delay seeking care until they have become sufficiently ill to justify a trip to the hospital, where a higher sum is paid for curative care. People rarely will travel farther than the established five-mile distance to the district centers for preventive care, a factor that was addressed by the World Bank. Preventive care must be readily available and must be accompanied by an active and continuing educational program, to be a viable component of a health agency. Like education, it does not sell well in the competitive market.

In the districts FNS covers in Kentucky, the major recent shifts in patterns of health service utilization have been noticeably from child care, which is largely health-oriented, to the care of the 65-and-over age-group, which is largely illness-oriented, with an overall reduction in ambulatory care encounters. At the same time, hospitalization of this age-group had increased; this shift would be difficult to reverse.

The increase in hospitalization was primarily in the 65-and-over age-group. From 1971 to 1974, the admission rate for this group remained relatively stable, fluctuating between 9 and 15 percent of the admissions per month, with an overall average of 11 percent per annum. This group forms approximately 8.2 percent of the population served in this county. The average hospital stay is 7.1 days for this group, compared with 15 days' average stay in other community hospitals in this county. The 65-and-over age-group uses 18 percent of hospital days at FNS, compared with 38 to 42 percent in two neighboring counties having similar conditions, and no nursing homes. The national average hospital days used by the group is 32 percent. During the first six-month period following the opening of the new hospital, the occupancy rate of this group increased to 27 percent.

The increase in charges, and the simultaneous pressure to reduce costs and collect fees, inadvertently led to a reduction in preventive care. At the same time, visits for acute and chronic health problems increased, with the greatest increase occurring in chronic flare-ups. Preventive health care had been promoted traditionally through an active home visiting program. A drop in home visits was accompanied shortly by a noticeable decline in nursing

clinic visits. This was evident particularly in districts where there was a change in nursing personnel. This decline was not visible in districts where the new nurse kept up her home visits. Home visits are a vital link between the family and the health system. It is in the home that the most effective teaching, consultative and supportive care occurs, and where the family can learn best to assume self-care. It is in this area of care that the family nurse and the nurse-midwife excel. The teaching process seems most effective when the family involved observes the nurse actually providing the care, when the family is encouraged to assume the responsibility.

This report has been made possible through continuous collection of statistical data since the inception of the Service. A realistic, though comprehensive and workable system, for collecting data was initiated in 1925, when the Service was begun. Gradually, this system evolved into its present form, which provides an encounter form for the recording of comprehensive information of the services provided, together with the charges made for the services rendered. The data collection system was developed through a HEW grant from the National Center for Health Service Research and Development. The encounter data, together with hospitalization data (PAS/MAP), are computerized, utilizing the same identification numbers. A Robert Wood Johnson grant is being used to help promote the development of primary health care services and education.

The data produced provides a ready means for studying shifts in patterns of health care utilization, services provided, cost benefits, and the impact of new policies on health services. These provide a sound foundation for planning health care management. Continuing refinement and more definitive studies are needed to resolve more specific problems.

This report focuses primarily on the benefits derived from (1) a decentralized system for providing coordinated preventive and curative care, and (2) the utilization of the primary care nurse, whose training focuses more on health care, and is considerably less costly than medical training. It has demonstrated the effectiveness of preventive-oriented health care in saving the lives of mothers and babies and in reducing costly hospital care and other curative services. It speaks to the difficulties encountered in selling preventive care to the people, as well as to governmental agencies, and the need for community-based home care services to maintain an active preventive-oriented health program. It does not detract

from medical care of the ill, but adds a broader dimension to it.

It demonstrates the impact of governmental reimbursements and policies on a traditionally preventive-oriented primary health care program, which has resulted in a marked shift to curative care and increased costs, without measurable comparable benefits. It encourages neglect of a patient until he becomes ill. The care of the ill requires more highly trained health manpower, more costly facilities, and is more time consuming. This shift leads to a greater centralization of services. It negates the delivery of effective preventive care services, which are designed to encourage self-care, and focus on good health in contrast to illness. We have not even begun to examine the psychological and social impact of community-based family-centered care in contrast to technologically-focused hospital-centered care.

Such shifts toward curative care give cause for concern in terms of the eventual impact on the health status of this nation and that of the developing nations: (1) the growing costs of health care, and (2) the well-being of the people. The program, as originally developed and designed by FNS, shows great promise for a universal model which may reverse the current trend toward curative care, if the program is supported through governmental policy.

Recent health legislation, the Public Health Planning Act 93-641, supports the primary care nurse. Kentucky is now in the process of developing regulations for primary health care centers which include the primary care nurse. (These are based on the model developed by FNS.) In addition, health legislation is needed which will permit licensure of the family nurse and the nurse-midwife in each state. This must then be accompanied by appropriations which will make the system workable at state and national levels.

It is an ideological approach to health care. The full social and cost benefits will not be felt for a long time, nor can the full impact be measured by scientific methods. It is a practical approach that makes sense, and meets current day-to-day needs.

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PANEL WORKSHOP
Health Program Development:
The Multinational Corporations

James P. Hughes, Chairman
Gerald W. Grawey
D. John Lauer
Thomas J. McDonagh
Irving R. Tabershaw

GERALD W. GRAWEY

On behalf of Caterpillar Tractor Company, I am pleased to participate in this international conference on health affairs, and hope that our experiences and methods of caring for the health needs of our employees will be of value to you.

I have been asked to address my remarks to Caterpillar's role in health affairs in Latin America. But before I do that, perhaps a few words about my company are in order.

Caterpillar is a multinational manufacturer of earthmoving and materials handling machinery. We employ over 83,000 people. Even though most of these people are concentrated in our manufacturing facilities located in 14 different countries, we literally have people all over the globe--doing such things as servicing our dealers, monitoring the progress of major earthmoving projects, and so on.

Because of this global exposure, we are vitally interested in the state of our planet's health affairs, and in what is being done to attack problem areas, whether it's the eradication of smallpox and malaria, or facing the issues of alcoholism and drug addiction.

We believe the trend of the past thirty years towards greater world economic interdependence is a positive force in health affairs also.

As a multinational company--along with other companies--we have a better grasp of health needs and problem areas, and a greater ability to obtain and exchange information on a worldwide basis.

You have probably heard or read some of the critical things being written about global business these days. In our opinion, these critical comments concentrate on

isolated examples and do not emphasize the positive things we are doing, such as in the area of health affairs.

As a first step in discussing our role in health affairs in Latin America, I believe we must agree on a concept or sense of perspective. For example, the health needs of the bush in remote jungle and forest areas along the far reaches of the Amazon, which involve the most basic of health services and medical attention, differ significantly from providing services to people at our manufacturing facilities in urban centers like Sao Paulo, Brazil, or Monterrey, Mexico. Since we are a manufacturer of heavy machinery, I will speak mainly to the health affairs of the urban area where our facilities are located.

A second necessary step in discussing our philosophy of health services is to give you an indication of that policy. Caterpillar has a philosophy on employee health and safety that is based on a single worldwide standard, namely, that every employee is entitled to good, sufficient medical care. In countries where this standard is not met when we make our initial investment, we work for the upgrading of local health care or making the health services more available.

At the heart of our belief, of course, is people. In 1974, Caterpillar published, "A Code of Worldwide Business Conduct," to state its overall beliefs on international business conduct. An important part of this code discusses relationships with employees, and states that "Caterpillar intends to protect the health and lives of employees by creating a clean, safe work environment." My responsibility as Medical Director is to see that this mandate is carried out on a quality basis, be it Peoria, Illinois, Sao Paulo, Brazil, or Monterrey, Mexico, for example. A majority of our 25 plants has a full-time medical director and staff of nurses who care for the health needs of our employees and assist me in seeing that our overall goal is achieved.

When discussing health affairs in an area of Latin America like Sao Paulo, Brazil, we are speaking of a sophisticated medical community, operating within a government-administered social security system that includes the provision of health services. Because of the nature of the social security system, which resulted in backlogs of cases, in delays in medical treatment, Caterpillar arranged for a so-called social medical company to attend to the health needs of our people. But I'm getting a little ahead of myself. Let's back up just a minute.

The nature of our business--manufacturing--requires that a man or woman be on the job on a dependable basis. If the nature of health affairs in an area is not conducive to this fact, we have increased health absenteeism. So we found ourselves in Sao Paulo in a situation that, if we did not provide the health care for employees, or if we did not arrange for it to be provided, we would face considerable absenteeism. For this reason we provide more medicine in our occupational dispensary in Brazil than in other locations, in order to encourage the man or woman to stay on the job.

The actual number of our employees and relatives included under our medical plan in Sao Paulo is 11,400! Our program in Brazil recognizes three distinct areas of company involvement in health affairs.

The first area is occupational medicine, including control of occupational diseases and working environment conditions; provision of occupational and nonoccupational first aid; actual assistance to work-related injuries, along with follow-up treatment and back-to-work orientation and readaptation. This health care takes place at the factory level and includes pre-admission exams, periodic exams and counseling on special problems like alcoholism. As I mentioned a few moments ago, we provide more preventive and emergency medicine in Brazil than in other locations because of the nature of medical care in Brazil, and to aid people suffering from minor illnesses.

The second area is nonoccupational medicine. We provide for a social medicine company to supply complete medical diagnosis and treatment to employees and their relatives. This is, in fact, a medical corporation with complete outpatient services. Caterpillar pays the full cost. We found it necessary to arrange for these medical services and care because of the problems of availability and backlog in health care through the government's social security system. This also helps to reduce absenteeism at the factory level. Besides overseeing the care provided by the social medicine company, we require a medical report on every attendance made outside Caterpillar's medical service, and check on the medical care provided to the employee's family. Our decision to go the social medicine company route in the nonoccupational area has proven to be a good one. Not only does it make service available on a timely basis to our employees and their families, it takes a little pressure off the public health system and decreases absenteeism.

Our third major involvement is in community medicine by helping to control endemic and epidemic diseases

through participation in vaccination programs, preventive medicine and general medical guidance on family problems. Community medicine is very important, as Latin America, like other developing areas, is going through a period of rapid urbanization, or, put another way, deruralization.

There are health problems in this process of urbanization, many of which are tied to the problems of poverty, illiteracy, etc., but we have these in some parts of the States, so I don't believe it's a matter of lack of attention to health needs in Latin America, rather it is a matter of gradual social adjustment to new patterns of living. For our part, we believe that providing decent employment is the best way to attack the community health problem at its base.

One final comment in the community medicine area. Last year when there was a serious outbreak of meningitis in Sao Paulo, we found ourselves scraping for serum wherever we could find it, and informing the folks back home that everything was being done to stem the epidemic. In this case we made sure our people in Brazil had the necessary medical tools to meet the problem head-on.

In conclusion, our experience and obligations in health affairs in Latin America is quite extensive, considering the fact that we assume the cost of care for 11,400 people, and participate broadly in occupational, nonoccupational and community areas. I believe these 11,000 people are receiving a level of health care greater than what it was before we were in Brazil, and everyone benefits from this process. The lesson, I believe, is that a multinational firm must be flexible to adapt its health programs to the needs of the area, and to fit local practices.

While we have one standard or goal, we have numerous ways of reaching that goal. The social medicine company in Brazil is one way. We believe we have an obligation to employees to make the necessary care available--it's good for business and it's good for people.

D. JOHN LAUER

The multinational company with which I am associated as Medical Director employs about 400,000 people in some 80 countries. The following remarks, however, are concerned primarily with the approximately 200,000 who work in 12 countries of Western Europe. They are engaged chiefly in the manufacture of telecommunication and electronic equipment and are employed by various subsidiary companies. It should be mentioned that while all subsidiaries are subject to policies and actions determined by management of the parent company, each is managed and operated almost entirely by citizens of the country in which it operates and is expected to abide by the health code and laws of that country.

Under our system, each major subsidiary has its own Medical Department, headed by a Chief Medical Officer, charged with attending to the health of all employees. Its goal is to continuously assess and maintain the health of each individual through preventive medicine and hygiene. It seeks to accomplish this by means of an occupational medical program comprised of these basic elements:

1. Medical examination at time of employment in order to assist in placing the person safely and within his physiologic capacities, and to establish a baseline of his health assets and deficiencies. It is against this baseline that subsequent medical studies can be measured.
2. Periodic medical examinations to determine the individual's health inventory as compared to his entrance examination. This study is especially important in ascertaining health changes if the person's work requires environmental hazards or the use of toxic substances.
3. Treatment of occupational injuries and illness that may arise out of the work.
4. Environmental hygiene. The place of work is studied by observations and measurements of potential hazards. Such findings can be compared and judged against the medical observations made on the worker. Thus they are checks on one another.
5. Preventive health includes programs which may arise as a result of the periodic examination and the environmental findings; public health measures as a part of the community health activities; and personal health counseling.

This thumbnail sketch of an occupational medicine program in a work environment is meant only as a springboard; individual units may elaborate on it and pass on their experiences to units elsewhere. We learn from each other.

Each of the 12 European countries where we operate has its own legal health code, and the manner in which these codes are administered varies. Belgium, for example, requires a measure of education and training in occupational medicine for physicians who take on the responsibility of a factory, mill, mine or office. Where there is insufficient personnel work to support such an officer, a designated occupational medical group in the community must be retained to undertake such health services. We have yet to come to these measures in the U.S.

On the other hand, the standards of the U.S. Occupational Safety and Health Administration often "spill over" into the European locations. For example, the U.S. vinyl chloride monomer (VCM) standard is much stricter than all European standards, except Sweden.

Multinational companies generally strive to be "community-minded" in their relationships to host countries, if only to offset the built-in resistance most people have to "foreigners." This manifests itself in many seemingly minor projects. While the caliber of our medical facilities is usually better than average in the community, local programs may allow more latitude in trying such socially-inspired projects as the support of a shelter workshop to train mentally and physically handicapped persons to do productive work in the assembly of telecommunication equipment. There is a Belgian city and a small French town where, when a new factory was planned and erected, the architectural design took into account the needs of the handicapped--something which one might not expect in most communities.

While few of these projects are totally new when viewed globally, many may be quite innovative in their local context. We endeavor to learn from one another by convening an annual conference of the companies' Chief Medical Officers, including their U.S. counterparts. We thus enjoy a free exchange of ideas and procedures, as well as a conviviality we all cherish, which gives us a sense of pursuing a common goal.

THOMAS J. McDONAGH

Multinational companies have made a significant impact over the years on the health conditions of the countries in which they have operated, both in an indirect and direct manner.

It has long been recognized that the socio-economic characteristics of a population have important effects on its health. The World Bank Sector Policy Paper, for example, notes that "Secular increases in health standards in Western Europe and North America were brought about much more by rising living standards and improving socio-economic conditions than by medical care per se."[1] Multinational companies make major contributions to the local economy. Jobs are provided, taxes are paid, local products and services are purchased and managerial and technological know-how are introduced. In addition, many corporations have philanthropic programs that may support medical research or individual health programs within a country. The socioeconomic ills of malnutrition, unsanitary living conditions, sub-standard housing and overpopulation--factors leading to poor health in a community--are all affected in a positive manner by the multinational company.

These are some of the indirect ways in which multinational corporations play a role in improving local health and living conditions. Directly, the impact is certainly more visible, although perhaps involving a smaller segment of the area's population.

From now on I will be specifically speaking about Exxon, although obviously much of what I will say is true of other large companies as well.

Exxon has long considered its employees its most valuable asset. Consequently, it has endeavored to keep them healthy and fulfilled on the job. We have an extensive occupational health program which, although primarily aimed at the employee, also may have significant effects on his family and the community. The main thrust of the program is prevention--an orientation in line with the World Health Organization report, "The Promotion of National Health Services," which recommends a shifting emphasis from curative to preventive health measures.[2]

Our employees are generally examined prior to placement in a job and at periodic intervals thereafter during their career. In some countries, these are the only health evaluations they receive, and the company doctor is the only physician they have access to. Incipient

health problems or risk factors for disease may be discovered early, when possibly they can be prevented or treated more effectively, thereby decreasing long-term disability. More developed conditions can be treated in a curative or at least beneficial manner. Immunizations are often provided the worker, and health education efforts may help to alter favorably both his and his family's health habits.

In many underdeveloped areas where local health facilities and services were minimal to absent, the company constructed and staffed clinic and hospital facilities. As local conditions have improved, these facilities have often been turned over to the community to operate. Where local health facilities are available, but substandard, the company has frequently contributed to their upgrading. In isolated locations, the company has provided public health services as well, such as improved sanitary facilities, malarial spraying programs, water treatment, housing, etc.

In the work place, our occupational health programs and attention to safe working conditions frequently set the standard for other local industry. Thus, in the long run, through the avoidance of accidents and exposures to hazardous substances on the job, the local level of health is improved, and the economic drain of the disabled worker on the community is decreased.

Physicians working in occupational health programs, along with their supporting staff, often are involved in the company's efforts to market products that are safe for human health and to minimize the effects of the company's operations on the community and environment. This helps ensure that the local populace and their surroundings are not adversely affected by the company's business activities.

I have been speaking so far in general terms, but allow me to make note of several specific examples within Exxon affiliates, mainly, but not entirely, in the Far East, that will demonstrate some of the points I have made.

In the Philippines, in the Bataan area, the local township near a refinery in which we had a partnership interest and were the operator, had no hospital facilities. Land for a hospital site was donated by the company, which then took a leadership role in helping to organize the construction of a community hospital.

In Sumatra, Indonesia, Exxon is the operating partner of an oil producing company. There we have two camp

settlements, each with a hospital providing health care for our employees and their families. Non-employee inhabitants of the surrounding communities, not infrequently, seek help there in an emergency.

In Pakistan, near Daharki, a small backward town north of Karachi, we maintain a well-equipped medical clinic at the site of our fertilizer plant. Employees and their families are provided health services there. The nearest hospital is more than 50 miles away. This area of the country is plagued with poisonous snakes, and our clinic has become widely known as the only reliable source of treatment for snake bites available to the population for many miles around the town. Patients come from as far away as 300 miles. We stock anti-venom and make it freely available to those who come to us. In 1972, 513 cases of snake bite were treated; in 1973, 206 cases were seen.

Family planning activities are undertaken indirectly or directly, depending on local political, religious or cultural conditions. At our hospitals in Sumatra, for example, direct family planning services, including oral contraceptives, IUD's, tubal ligation and vasectomy, are available to the employees and their spouses.

In Singapore, during a recent refinery expansion, we developed a model safety program. This not only decreased significantly the accident rate during the construction period, but received a fair degree of attention and praise from the government and the public media. For the first time in Singapore, hard hats, safety shoes, safety nets and belts, when working at heights, became required equipment in hazardous areas. As a result, I feel that we had a significant impact on the community's safety consciousness that well could save lives and prevent crippling injuries in the future.

We make a determined effort to upgrade the professional capabilities and knowledge of our overseas physicians, who for the most part are nationals of the countries in which they work. Educational materials are forwarded to them on a regular basis, and many have been sent to health centers in the more medically sophisticated countries for training courses. Attendance at medical meetings in their own countries is encouraged and is at company expense, frequently even for our part-time physicians. Similar training opportunities are often provided our full-time occupational nurses as well. By raising the general level of competence of our medical professionals, we are helping to contribute in a positive way to the health talent pool of the nations in which we operate.

Leaving more recent times, and Asia in particular, permit me to cite two other specific examples of contributions made in the past to the health of our employees and families and the community as a whole.

In postwar Germany, there was a critical shortage of food. During that period, the company operated a large farm to supply food products to our employees and their families, which also helped decrease the drain on the country's resources.

In a South American nation years ago, during the establishment of a new operation and the setting up of health services, it was evident that there was a severe shortage of nurses within the country. The company established a nursing school that became a model of excellence and whose graduates contributed in a major way to the delivery of health services in that country.

I will close my remarks here, but summarize by saying that multinational corporations have an interest in the health of the local community. This concern not only serves community interests, but the company's as well. For ill health imposes economic costs, as the World Bank report points out,[3] by reducing the availability of labor and impairing the productivity of employed workers and capital goods. If primary health care is defined as a health approach, integrating, at the community level, all the elements necessary to make an impact on the health status of the people, then industry has been and will continue to be an important contributor in this area.

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IRVING R. TABERSHAW

It is obvious that multinational corporations will play an increasing role in the world expansion of industry. Hence, it is important to examine the place of these corporations in international health.

Since I am not now, and have never been, employed by a multinational corporation, it is fitting to ask what my qualifications are to speak on this subject. I have attended many international conferences and have had several WHO fellowships to Europe and to underdeveloped countries. I had the opportunity to visit Iran some ten years ago to assist in developing a school of public health in Tehran. Two months ago I revisited Iran and observed the shock of rapid industrialization on this relatively underdeveloped nation. I might also comment that many places in the United States have all the characteristics of an underdeveloped country, and that the health impact of a national corporation which settles in such an area is not only reminiscent, but represents in miniature what happens in the international scene. In this area of activity, I have had abundant experience.

The observation is repeatedly made that industrialization leads to better health. Hence, a multinational company which establishes an industry in an underdeveloped area of the world provides better health for the native population. There are many definitions of health. The diagnosis of illness is relatively uncertain, while death is certain and verifiable. Mortality data is, therefore, a surer index of the health of the nation than morbidity, and (1) life expectancy (2) death rate (3) infant mortality are the usual indices quoted. Life expectancy is probably the best indicator, since it integrates all the factors which affect the well-being and the life of the individual. There are other measures for determining health status; for example, in industry, productivity, absenteeism, and worker morale may be used, but these are so difficult to measure that for all intents and purposes they are not useful in the evaluation of the effect on health of the multinational corporation. Health statistics demonstrate that industrial nations have a better life expectancy, a lower crude death rate, and a lower infant mortality (and compensating for this longevity is a lower birth rate compared to the underdeveloped countries).

While the premise is true, that an industrial society has better health for its population than other areas, the

evidence is that this is an indirect result, because industrialization raises the standard of living and with it comes better housing, better nutrition, better clothing, better sanitation and less crowding. All of these lead to a decrease in mortality from infectious disease. The most often quoted evidence is that tuberculosis was reduced from 200 deaths per 100,000 population from 1800-1900, when it became 70/100,000 without effective treatment, and the disease had become increasingly less frequent in the United States even before the advent of chemotherapy.

It should be noted that a multinational corporation, or for that matter any domestic corporation, is organized to make profit and that management is not concerned with health (except for its public image), but rather is interested in the efficiency and productivity of its work force. There is the implicit assumption that a healthier person is more efficient, but the relationship is often a tenuous one, e.g., it is known that some individuals with static disabilities, if properly placed at work, can be as, or more, productive than those who are presumably entirely healthy. However, on the assumption that the health of the worker is an important element in productivity, industrial organizations are interested in health and many have well-developed programs. I might comment at this point that my colleagues here represent the most enlightened and most advanced companies in this regard and that they do not necessarily represent the ordinary multinational corporation.

I would like to discuss how the various aspects of public health activites or some of the constraints under which the multinational corporation operates.

1. The industrial corporation does have an interest in public health where endemic disease threatens the very existence of the project. The Panama Canal could not be built unless malaria was controlled, and it was enlightened self-interest of the construction companies to provide and establish effective public health measures to control this endemic and debilitating disease.

2. Management is interested in individual disability from diseases like tuberculosis, anemia, alcholism, drug addiction, etc., which directly affect the productivity of the worker and which can be diagnosed and controlled. This type of disease is obviously the focus of interest on the part of the multinational corporation in the underdeveloped countries.

3. Emergency and curative care for the worker and his family impose a never-ending problem to all industrial

establishments. Here the interest of the multinational company is primarily in the technical and managerial staff, and particularly in the expatriates who have either volunteered or been assigned to work outside of their country. The health care service that the corporation provides for the worker and his family depends on a number of factors, e.g., the length of stay in the foreign country may be short, such as in a construction outfit, or relatively long in a company that is producing a raw material, affecting the level and degree of health care provided. It may be, for example, easier to provide an emergency service, and for staff members with complicated medical problems to be flown back to the home country for definitive medical care. This approach does not necessarily represent selfishness or disinterest on the part of the multinational corporation, because it is well-understood that it is almost impossible to impose a health care delivery system from the outside on a culture whose mores, customs, religion, and educational level are quite different. Furthermore, an effective health care capacity cannot be introduced unless there is a health infrastructure with properly trained staff, equipment, and facilities. Health care services are a national effort, and, hence, multinational corporations, even if they wish to provide expanded health care services for their workers and the others, are limited by the constraints imposed by the situations in the foreign countries.

4. Multinational corporations have been accused of polluting the environment. Industry generally, up to very recently, considered that the environment was common property and used the air, water, and land adjacent to its facilities to dispose of its wastes. This attitude is gradually changing. But, this lack of concern with regard to environmental pollution still represents the attitude on the part of many multinational corporations. This statement may be vigorously denied and even refuted by some of the far-sighted and experienced multinationals, but as a general statement it probably holds true.

5. Another limitation on health care services provided by a single industry is the migration of rural workers to the urban environment, which is apt to overwhelm the resources of any plant, including any medical staff, facilities, or equipment they may install. Industry in the U.S., when establishing new plants, most often look for a settled community where the amenities are available, such as churches, restaurants, amusements,

etc., rather than building these facilities de novo. The burden on private industry is apt to be overwhelming if all such facilities have to be created and is avoided if possible.

6. Another constraint on providing health care services by any one industry is that the responsibility for this type of development in an underdeveloped country is entrusted to government agencies within the nation or to international organizations. Any one company is at a disadvantage in trying to provide a service without the help of these organizations. An industry is not inclined, unless forced to, to be subservient to these other interests.

7. There usually is no body of informed or trained technical workers, and the health base in most underdeveloped countries is inadequate. Usually there is no one to speak up for the worker or for the protection of the environment. Hence, there is no public movement to develop environmental protection or health care.

8. The attitude of most multinational corporations, and of domestic industry as well, out of bitter experience, is not to get involved in health care services for these are too diffuse and too expensive. If it does, the worker and his family may turn on the industry as too paternalistic or trying to control a vital area in the life of the individual. Generally speaking, therefore, multinational corporations, as well as other firms, are indifferent or gun-shy and make it a policy to be involved in the health care of the native population as little as possible, except for the care of the technical and managerial staff of the expatriate and the native population. Nevertheless, the establishment of a health care center for this favored group provides a standard and a technical resource which, if the underdeveloped country wishes, it can call upon.

In summary, the multinational corporation brings to the underdeveloped country elementary sanitation, i.e., a safe water supply, a waste disposal system, the control of endemic diseases, and advice and guidance on other aspects of public health. The industry becomes a technical resource for consultation and occasionally for specific support for the control of public health problems. Personal health care services are usually limited and benefit mostly the expatriate and the upper socioeconomic group of the native population. In addition, the multinational corporation provides a vehicle for introducing health services and for teaching, by example, the use of facilities, equipment, drugs, and other paraphernalia of

health care services. For the developed country, the multinational corporation is just another industry and adds to the burden of the health problems in the industrialized nations, namely, degenerative and neoplastic diseases. Howevever, this is more than compensated for by larger benefits of industrialization.

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PANEL WORKSHOP
Health Care Providers:
Roles for Women

Effie O. Ellis, Chairman
Elizabeth Sharp
Rosemary Wood

ELIZABETH SHARP

As we focus on the contribution women can make in the health care field through gainful employment, I wish to explore with you the relationship between work outside the home and parenting. My frame of reference will be working mothers in the health field; my model will be a Nurse-Midwifery Service which employs several nurse-midwives part time.

The verb "to parent" has achieved common usage but appears in few, if any, dictionaries. Therefore, I shall share with you the definition written by Fitzhugh Dodson in 1970: "to use, with tender loving care, all the information science has accumulated about child psychology in order to raise happy and intelligent human beings."[1] Implicit in this definition is that parenting is a learned role and a time consuming one. As inexact as the science of parenting is today, it cannot be left to chance. In our society today, where it is estimated that almost half of the women are working outside the home, the important work of parenting faces competition. Bronfenbrenner, in a recent article on "The Origins of Alienation" stated, "When there is no support or recognition from the outside world for one's role as a parent and when time spent with one's family means frustration of career, personal fulfillment and peace of mind, then the development of the child is adversely affected."[2] Early adverse effects are emotional and motivational; antisocial acts and thinking disorders occur as later manifestations of deficits in parenting. Bronfenbrenner offers explanations for the failure to achieve successful family conditions; he includes the withdrawal of social supports, isolation, breakdown of the extended family, neighborhood, and community.[3]

As we all know, women have not been silent in the last decade over their roles. Their discontent was initially highlighted in 1963 by the controversial best-seller, The Feminine Mystique, by Betty Friedan. Home, husband, and children no longer represented all that women wanted or all that it was thought they wanted. "Self-realization," "self-fulfillment," and "identity" were considered essential. Work outside the home was a means of solving the identity crisis. Having to work for economic reasons was no longer the prevailing reason for women seeking employment.[4]

Despite the emphasis on changing roles for women, we are still far from ensuring that parenting will occur while mothers work. It seems likely that expressions of dissatisfaction with the stifling role "at home" are not coupled with a change in attitudes specific to caring for children. Data from a 1970 National Fertility Study indicated that a majority of respondents (under 45, married or had been married) felt the man should achieve outside the home and the woman should take care of the home and family. Furthermore, less than half of the respondents felt that as warm and secure a relationship could be developed by working mothers with their children as compared to nonworking mothers; and a majority felt that preschoolers suffer if the mother works. Blake, in interpreting these findings, pointed out that if it is "so clearly normative for women to give primacy to their derived status if they marry and have children, few highly developed societies attempt to offer much supplementary help to married women who work."[5] There is little question that we are in the early stages of devising ways to enable mothers to work and still fulfill parental responsibilities.

Likewise we are in the early stages of research to assess the effects of maternal employment on the child. Hoffman recently reviewed more than a decade of research. In her review, Hoffman stresses limitations of many of the studies and encourages research which would "examine effects under specific conditions." Nevertheless, her analysis of findings of numerous studies is interesting, supportive of working mothers under some conditions, and illustrative of the complexity of studying effects of maternal employment on children. Of special relevance to examining the relationship between work and parenting are the following tentative findings. First, with respect to the mother's emotional state: "The working mother who obtains satisfactions from her work, who has adequate arrangements so that her dual role does not

involve undue strain, and who does not feel so guilty that she overcompensates is likely to do quite well and, under certain conditions, better than does the nonworking mother." In considering the effects on the children, Hoffman summarizes data according to infant, preschool and school-age child. Adequacy of the infant's care depends upon the nature and predictability of the substitue care. School-age children fare well, but research related to preschool children is too limited for drawing conclusions.[6]

It is reassuring to know working is not a consistent deterrent to effective parenting, but Hoffman's review highlights for me the importance of adapting a work situation to the needs of each particular working mother and her family.

So far I have mainly focused on the effects of working on mothers and their children. I believe the contribution of married women with children in the work force is essential to replicate the natural composition of society in the work situation. They lend viewpoints, realities, and experiences that enhance a group of workers. Given the isolation the individual family and the individual single person experiences today, working mothers can be a balancing, stabilizing force for their male and female colleagues without families.

In the health care situation, this balancing and stabilizing are of particular importance. As paramedical orientations such as social work, counseling, and welfare and community agencies become interrelated with basic health care providers, a family-centered focus becomes more necessary to successful patient management and more expected by the patients. Working mothers have their own daily family experience as an added reference in direct patient contact and in consultation with colleagues.

As I now move on to discuss what I have observed in employing women with children, I wish to limit my remarks to part-time employment. Some parents choose full-time employment, but I have found that it frequently works poorly until the children are grown or unless special arrangements are made to alter schedules to accomodate parenting obligations.

Roles in health, I perceived, have some unique characteristics which may contribute to the difficulty in having part-time workers. Consider nurse-midwifery. It requires twenty-four-hour, seven-day-per-week coverage. In our service at Grady Memorial Hospital, we have implemented the concept of primary care for all nonemergency

types of care, i.e., clinic visits, postpartum rounding; unscheduled events, such as emergency room visits and labor and delivery, are handled by the nurse-midwife on duty. This system clearly limits, but provides part-time work options. Nurse-midwives functioning in the clinic must work frequently and regularly enough to see their patients in the clinic and in the hospital after parturition.

The successful employment of women who are concurrently fulfilling the parenting role involves the commitment, participation, and/or support of the employer, colleagues, community resources, the employee's family, and the part-time employee herself. It has become apparent to me and my colleagues in our Nurse-Midwifery Service that part-time or special workers are important, but here are some of the things we've learned.

A position must be tailor-made for the part-time worker and consist of functions consonant with the philosophy of the health care system. It is helpful if the weekly work schedule can periodically contract or expand to meet needs of the worker's family or the needs of the health care system. The part-time worker must be accepted by the full-time employees. Several processes seem to facilitate this: (1) full-time personnel participating in identifying potential functions of the part-time worker; (2) sharing with staff the indications that the potential part-time worker has satisfactory substitue care for her children; and (3) identifying the unique contributions that the part-time worker brings to the health care system. Initially, my colleagues were reluctant to employ part-time nurse-midwives. Previous experience for some had demonstrated that part-time workers were a burden--they worked desirable hours and missed work when the children were ill. Any perceived preferential treatment is resented. However, we have found that a group committed to the preferences of all workers, full or part-time, and aware of the unique contributions of all, seems to avoid the discontent which might be engendered by meeting work needs of some individuals.

Because of the varied schedule demands we must meet in staffing the clinics, labor and delivery, and a twenty-four hour on-call service, we are able to adjust to the preferences of all. Because part-time workers ease the clinic and labor and delivery load during the day, our full-time employees are able to schedule special projects that fulfill their own growth needs as well as the department needs.

As I implied earlier, it is crucial that the part-time

worker clearly identify what she can do within the framework of her family style and support, within the outside resources available to her, and within the scope of her professional competence.

It is obvious that the part-time worker may not have the opportunity to function as fully as she has been prepared to or as she would like. This can be offset, however, by the satisfaction obtained through fulfilling a needed function within a group of colleagues. For example, one of our part-time workers can work the day shift consistently on four weekdays. She has real interest and skill in developing an interconceptional care clinic and is doing so. Subsequently, she will orient all nurse-midwives to the clinic.

Although it might seem expensive, it appears essential that part-time workers participate in staff meetings and in-service education. Such activities add to group cohesiveness, ensure valuable input from part-time workers, and include them in the decision-making process.

Perhaps I see the employment of part-time workers as valuable to a health care system and a step toward their full employment after active parenting is over; the expenditure of time, effort and money on having part-time workers may be regained when they enter the work force full time. Complex health care disciplines change so rapidly that reentry into a profession can require extensive updating. Why not keep people up to date?

In summary, parenting itself is a contribution to health, but evidence exists that working parents may be happier. I am convinced that parenting and work can be combined in the health care field to the benefit of the patients and co-workers, and without sacrificing or abdicating responsibilities of parenting.

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ROSEMARY WOOD

As an American Indian woman, I see the rights of Indian women as a part of the rights of Indian people. As an American Indian nurse, I see that Indian self-determination is a right of Indian people, but a right which is presently not a reality.

The white population has many varied and often conflicting beliefs about Indian people. Some of the beliefs commonly held include the following: the Indian is a proud savage, noble and beautiful; the Indian is vanishing, dying out, becoming assimilated; the Indian doesn't pay taxes, receives welfare from the federal government, clings to the past. These beliefs and others are a part of the white culture and have been, and still are, passed on from generation to generation, as is the nature of all culturally defined beliefs.

I will not attempt to deal with the white culturally defined beliefs about Indian people; that is for the holders of those beliefs to deal with as they see fit.

Indian people have a dual citizenship. That is, Indian people are citizens of the United States, and, as such, have the same rights and responsibilities as do any other U.S. citizens. In addition, Indian people are members of various tribal governments. Indian governments or nations have a special relationship with the federal government which has been established via treaty agreement, congressional ruling and tradition. It was via treaty agreement dating back to the 1800's that the U.S. Government incurred the obligation to provide health services to Indian people. In the early 1800's all relationships between the U.S. Government and Indian people were conducted via the Department of War; when health and health care were added to this relationship that, too, was conducted by the Department of War. In 1849, the Bureau of Indian Affairs was transferred to the Department of Interior, including duties of health care delivery. In 1955, the Indian health program was transferred to the Department of Health, Education, and Welfare--Indian Health Service (IHS). Since 1955, health services for Indian people and the health status of Indian people have progressed steadily.

The American Indian population as a whole is young and growing. This is partially due to the increase in birth rate. There also has been a decrease in the infant death rate since 1955; much progress has been made in decreasing deaths due to tuberculosis and gastroenteritis.

Despite this progress, the health status of Indians remains far below that of the nation as a whole. For example, although the infant death rate has decreased since 1955, it has done so only within limits. While the infant death rate for Indians and Alaskan Natives is as low or lower than that for all races, this is so only up through the first 27 days of life. The infant death rate for Indians and Alaskan Natives more than doubles the rate of all races between 28 days and 11 months of life.

As previously stated, the Indian population is a young population, and this fact can be partially accounted for by the number of live births; however, the Indian population is young also because the average life expectancy is 55 years of age; on reservations the life expectancy is 47 years. Indians have a higher death rate than all races at all ages up to age 65, where they become almost equal. Between ages 70-85 and over, the death rate for Indian people is less than the rate for all races. This is so simply because there are not many Indians left after age 70. Indian death rates due to accidents, uncontrolled diabetes, homicide and suicide, are much higher than the rates for all races. Deaths due to suicide are 3:1 the national average. Within the American Indian community, deaths due to suicide peak between the ages 12-24, whereas in the white population, they do not begin to peak until after age 55. This data documents high health need within the Indian community.

In conjunction with high health need, there is low health manpower within the American Indian community. There are 500 registered nurses, 80 physicians, 4 dentists, 4 psychologists, 4 anthropoligists, no sociologists, and 4 physical scientists.

During my introductory statement, I remarked that "as an American Indian woman I see the rights of Indian women as part of the rights of Indian people." This panel, however, has been titled, "Roles for Women." Therefore, I will discuss the roles for women from an American Indian nurse's viewpoint.

American Indian women have been subject to dual discrimination within the American society. First, the Indian woman has been subject to those stereotypes and myths concerning American Indians per se. Secondly, the American Indian woman has been subject to those inequities found in the economic and educational systems which involve women per se. That the society at large combines these two prejudices in such a way as to hold the Indian Woman in less favor than either Indians in general or women in general can be seen in this society's word for the Indian woman,

i.e., "Squaw." The term "Indian Squaw" is a word symbolic of the concept of a female creature something less than human, possibly something more than animal. In a series of children's reference books, for example, which has been carried recently by grocery store chains, there was a section picturing animals and their young; in that section was an Indian mother and child with the caption, "Indian Squaw and Papoose."

Health care systems are institutions of a society; health care deliverers are products of a society. The society which teaches its children that Indian women and Indian infants come under the infrahuman category can be assured that the health care delivery provided by future generations will be much different for Indian squaws and papooses than it is for white women and their children. If an Indian woman happens to be also a health provider, she is an Indian squaw health care provider, and, as such, is seen less worthy of social status and financial remuneration than are white women health care providers.

That American Indian women health care providers are considered somehow less worthy than their white counterparts, is seen not only in small rural areas and on Indian reservations, but it is obvious in federal job announcements by government personnel departments and by the U. S. Civil Service Commission. On September 3, 1975, the Indian Health Service announced the position vacancy for Chief, Nursing Services Branch. The Nursing Branch of Indian Health Service is responsible for more health care personnel than any other branch in IHS. Up to this point in the long history of Indian Health Service, the Chief Nurse has been a white nurse; in recent history the Chief of Nursing Branch has been a commissioned officer at four-stripe rank, which is equivalent to a GS-14, 15 and 16. This year, due to an increase in the number of qualified Indian nurses, and due to the enforcement of Indian preference, it is almost certain that an American Indian nurse will be awarded the position of Chief Nurse. It is at this precise moment in history that the Personnel Department, working in concert with the Civil Service Commission, has chosen to downgrade the position to a GS-13. It is simple to see the difficulty which an Indian woman at GS-13 will encounter when she attempts to work on an equal basis with the chiefs of other departments, all of whom are GS-14 and above, and who for the most part are men and white. It is also simple to see the difficulty an Indian woman at GS-13 will encounter when she attempts to provide supervision and leadership to nurses structurally under her who are white and GS-12-14.

This paper demonstrated that the health needs of American Indian people are greater than are those of the society as a whole, and that the health care resources are less than the society's as a whole. In years past, both the federal and private sector stated that one way to improve the health status of Indian people was to recruit Indian women in leadership roles within the health delivery system. However, according to these planners of Indian health care, there were no qualified Indian women to assume leadership roles. Yet as Indian women do become qualified and, indeed, do seek leadership positions in the health care system, the health care system seems reluctant to accept their qualifications.

Thereby, Indian women are left with the question: what is the role for women as health care providers?

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PANEL WORKSHOP
Health Programs in Developing Countries (Afternoon Session)

George A. Silver, Chairman
Clifford A. Pease, Jr.
Russell E. Morgan, Jr.
David M. French

RUSSELL E. MORGAN

The expectations of all people have risen to the point where the demand for a better quality of life represents a dominant force throughout the world. Resources, always in short supply, are being sorely taxed by escalating demands for services that are perceived as basic human rights. This is especially apparent in the health sector, where rising expectations and rapid population growth conspire to impede the extension of even minimal health services to the less advantaged of the population. In most developing countries the people who live in rural areas comprise nearly 80 percent of the total population, and in the best of circumstances, less than 37 percent of these rural dwellers have access to any type of health service.

The governments who are primary providers of health services in the developing countries are constantly facing difficult choices. Resources presently available for health are not only limited but a large percentage is being used to care for people who are ill. In a recent survey carried out by the World Bank, it was found that 26 percent of the 65 developing countries included in the survey have an annual per capita outlay for health of less than $1. Further, an analysis of government expenditures revealed that "seldom do they exceed 2 percent of GNP" and that "public health services cover only a small proportion of the population because heavy emphasis is placed on high cost, individual curative medical care, as opposed to environmental and preventive measures."

Increasingly, health is being viewed by policymakers and planners as an essential and integral part of the economic and social development process. Certain health

measures, such as the control of communicable and infectious diseases, changes in nutritional and reproductive behavior and in environmental conditions, are viewed as having direct relationship to developmental efforts. In the judgment of economists who are engaged in investigating the impact of health on economic development, there is urgent need for health policies and programs that enhance the productive capacity of the labor force and permit development to take place in geographic areas where low standards of health and health related problems are inhibiting progress. Increased productivity and access to raw materials are, of course, critical to the expansion of business and industry.

Currently, many governments are reassessing their health priorities and are beginning to emphasize health improvements for all persons rather than quality care for a few. This shift in emphasis has important connotations for development.

Some of the most devastating health problems in the developing countries are those that could be significantly reduced through individual and collective action. For example, diarrheal diseases which are a major cause of infant mortality are preventable through individual initiative and health behavioral changes. Personal hygiene, along with potable water, are the necessary ingredients. These types of initiatives are not dependent on a health delivery system and therefore can occur in areas presently not served.

U.S. foreign assistance efforts in health, both governmental and nongovernmental, have focused primarily on developing health manpower, organizing health services, and eradicating or controlling specific diseases, such as malaria and smallpox. The long hard process of achieving health improvement is complicated by ever-increasing numbers of people to be served. Government income constraints in the poorer developing countries compel consideration of added sources of support for health activities. This concern has generated interest on the part of governments in developing countries and foreign assistance groups in finding ways of getting individuals and communities to assume increased responsibility for meeting some of their own health needs. Drawing on the experiences of the United States and other developed countries where the private sector has played an important role in influencing health activities, initiating health services, and stimulating citizen participation in health affairs, health experts considered it logical that similar activities in developing countries would

accelerate health development. Information, however, was not available about the extent to which the national (indigenous) voluntary and private sectors in developing countries were involved in health work.

An initial step in exploring such involvement was taken by the American Public Health Association through a study which was begun in 1969. The study, carried out in collaboration with the World Federation of Public Health Associations, addressed the following: 1) the prevalence of indigenous voluntary health organizations; 2) their contributions to the achievement of national health objectives; and 3) the obstacles they face in obtaining citizen participation in the health affairs of their countries. The activity was financed initially by the Milbank Memorial Fund, and later by the U.S. Agency for International Development. Six major conclusions were drawn from the study:

1. Voluntarism in community health affairs is not a phenomenon unique to the culture of developed countries. In fact, national (indigenous) voluntary health agencies and societies of health professionals were found to be functioning in the 63 countries surveyed.

2. While national voluntary groups in developing countries are contributing in varying degrees to health improvements, they are not working to their full potential due to lack of expertise and resources.

3. The impact of national voluntary health organizations in developing countries is hampered by the lack of mechanisms for fostering joint planning and action by the voluntary groups themselves and by these groups and their respective governments.

4. The ministries of health in many of the developing countries value the contributions being made by the national voluntary groups and hope that in the future they will place increased emphasis on educating the public about health and stimulating citizen participation in health affairs.

5. The programs of many of the national voluntary health organizations are in a state of transition. For these organizations, education and influence for changes in health behavior are becoming their new priority.

6. The potential of the national voluntary health organizations in many developing countries will not be realized until the concept of "voluntarism" is broadened. At present, many of them depend on government or international organizations to finance their operations, and little is done to seek contributions of money, material and manpower from individuals and local organizations

comprising the private sector. Furthermore, their membership is usually small, drawn from the capital city area only, and comprised mainly of individuals from the middle socioeconomic class of the society.

Also included as a part of the APHA study were successful demonstration projects in Costa Rica and the Philippines in which efforts were directed toward strengthening voluntary involvement in health work.

When the study findings were shared with representatives of voluntary health organizations and governments, the governments considered the concepts most useful and proposed further action be initiated as soon as possible. The representatives at the Costa Rica Conference recommended and took steps to establish a National Committee of Voluntary Health Organizations. Participating groups pledged staff and other supporting services to aid the Committee in achieving legal sanction and in preparing a plan of action. In September of this year, the National Committee achieved legal recognition.

In the Philippines, in which representatives from 16 countries participated, it was the consensus that the voluntary and private sectors of developing countries should be more actively engaged in helping to meet the health needs of their nations. The opinion was expressed that a good means of achieving this goal would be to establish linkages with the voluntary and private sectors of developed countries where the resources and work of nongovernmental groups have had, and continue to have, a significant effect on health developments. The establishment of these linkages was encouraged. Joint action of the private sector in developing and developed countries could offer expertise, shared experiences and added resources for major contributions for health improvements in developing countries.

The APHA has been asked to explore the interest of the U.S. voluntary and private sectors in participating in the formation of such linkages. The Strategy Conference* is for this purpose. Invitations have been extended to a broad sampling of the U.S. voluntary and private sectors, including business, industry, labor, civic organizations, philanthropic groups, professional societies, religious organizations and voluntary health

* Copies of the Conference report are available by writing to: Mr. Russell E. Morgan, Jr., American Public Health Association, Division of International Health Programs, 1015 18th St., N.W., Washington, D.C. 20036.

agencies. Approximately 40 participants are expected to attend the Conference to be held on November 10-11, 1975 in Washington, D.C.

An initial step was the formation of a Conference Planning Committee with membership drawn from various elements of the U.S. voluntary and private sectors. Participation of the members has been on a voluntary basis and supported by their organizations. APHA, with funds from AID, has provided staff and consultant services. Other expenses associated with the Conference are being borne by the voluntary and private sector organizations and AID. The key question to be discussed by the Conference participants will be, "Under what conditions and in what ways might the voluntary and private sectors in the United States work with the voluntary and private sectors in developing countries, to encourage and support increased voluntary citizen participation in the health affairs of developing countries."

DAVID M. FRENCH

By the early 1960's under WHO leadership, an ever-increasing effort was being mounted to eradicate smallpox from the earth. The United States, through its Agency for International Development (AID), became involved in a major way through the WHO African office at Brazzaville, beginning in 1966, to help in smallpox eradication from the African continent. Recent reports in the press are controversial; but some claim that, with the exception of Ethiopia, smallpox has indeed been eradicated in Africa.

The implications of the successful eradication of a significant killer and crippler of mankind by preventive means, for a finite and reasonable investment of funds and personnel, are indeed mind boggling. When compared to the infinite investment in time and money required for the treatment of the same disease and the amelioration of its crippling effects, one can deduce that maximum extension of the prevention model to a number of other diseases is ultimately the more rational approach. It was quite natural, therefore, for WHO and AID to desire to build on their success in smallpox eradication by continued refinement of the organizational know-how which had been developed on a regional basis, and which in turn had been so essential to the success of the smallpox eradication campaign. The means of success were no less obvious to the ministries of health of the various countries, and, therefore, meetings of these various ministries, WHO, and possible donors, soon led to a consensus in early 1973 to establish a regional approach to health problems; in all, 20 Central and West African countries were involved.

WHO involvement, with AID as a possible donor, came to closure in a meeting at Brazzaville, February 21-22, 1973, the product of which was a project paper issued by WHO, the highlights of which I shall cover in summary.

Specific project goals identified were: "(a) to strengthen the organization and management of the ministries of health in 20 Central and West African countries; (b) to continue established disease control programs; and (c) to undertake additional programs, including health planning and the delivery of public health services as determined by country priorities, resources and needs."

The project paper specifically notes two basic assumptions: (1) that "the countries of the region will continue their cooperative relationships with WHO, L'Organisation de Coordination et de Cooperation pour la lutte contre les Grandes Endemie (OCCGE) and L'Organisation

de Cooperation pour la lutte contre les Endemies en Afrique Central (OCEAC)," and (2) "...other major donors will retain, as a high priority item, the development of basic health services...."

Four kinds of activities were designated as those which would develop effective mechanisms for dealing with the region's health problems, as follows: (1) coordinated planning, (2) manpower training, (3) development of a prototype health delivery system, and (4) improved demographic and disease collection analysis.

Lastly, in the paper's discussion of the goals, it should be noted that it was anticipated that (1) "interest will be developed by other international donor organizations that will facilitate closer coordination, planning and cooperative health programs, and (2) funds from other sources will be (made) available to assist in the development of certain elements of the health delivery system such as MCH/child-spacing, demographic and vital data collection, nutrition activities, etc." In addition to the U.S., other donors identified were France (FAC,* OCCGE and OCEAC), the United Kingdom, UN agencies (WHO, UNICEF, ILO, UNDP, etc.) and the host countries. Also identified in terms of specific programs were the European Economic Community's European Development Fund (FED), Canada's Canadian International Development Agency (CIDA), and Sweden's Swedish International Development Agency (SIDA).

And, lastly, certain specific programs of AID in existence were pinpointed: the Maternal and Child Health Extension project, the DANFA project in Ghana, the University Center for Health Sciences (CUSS) project in the Cameroons and the OCEAC Public Health Training Project. All were identified as essential tie-ins to the proposed new 20-country project.

Of great interest, as we developed our proposed project in response to the preceding goals, is an eloquent presentation in the project paper indicating the vastness of the problem (backed up by statistical quotations) and the smallness of the resources in personnel and funds available. The conclusion was the need for reorientation of health services, and I quote: "The countries of Central and West Africa are now realizing the necessity for expanding the provision of health services to the rural populations emphasizing public health and prevention. They are

* Fonds d'Aide et de Cooperation de la Republique Francaise

also beginning programs for health personnel in order to equip them for this new role." It is further pointed out in an AID Reconnaissance Team Report that "health problems of the region are dominated by preventable diseases of mothers and children, who comprise 65% of the population and are located predominantly in the rural areas....The health delivery systems of the region are characterized by an emphasis on curative medicine in urban areas. Thus, the governments of this region are attempting to meet the health challenge posed by an overwhelming burden of preventable diseases with resources that are basically inadequate, and a (large) portion of which are being unwisely invested." Thus, it can be seen how the conclusion to reorient health services was arrived at; and to indicate the full extent of this reorientation, I further quote: "In most of the countries of this region, a health delivery system designed to reach the greater part of the population is going to be largely dependent upon health workers, other than doctors, as the primary providers of health care. Thus, training of health personnel to function effectively as the extension worker in the delivery system is a prime necessity."

Following the WHO-sponsored Brazzaville Conference, a specific project proposal was generated and ultimately funded by AID. The three areas to be addressed were identified as (1) to develop and improve Health Planning and Management capabilities of Ministries of Health, (2) to further develop and improve health manpower training, and (3) to further develop and expand a disease surveillance and health information system. One should note at this point that these encompass three of the four activity areas referred to above in the WHO project paper, leaving out only the development of a prototype health delivery system.

The 20-country project proposed by AID was to be accomplished in two phases, the above three activity areas being accomplished in Phase I, further identified as a nonoperative phase in terms of specific delivery program activity. The initial phase was proposed to cover a two-year period, generated out of an African-based office which would draw heavily upon consultants who would spend brief periods on the scene in Africa. Such activity would in effect constitute the planning and preparation for an operative Phase II. Specific objectives to be addressed in Phase I would be:

(1) improving and extending training programs for health officials at the regional centers in Lomé and Lagos;

(2) reviewing and/or redesigning existing National Health Delivery Systems;
(3) assisting in formulating and updating National Health Manpower plans;
(4) assisting in further development of the regional data center in Abidjan, both as to intrinsic capabilities as well as to its own program; and
(5) giving consultation assistance as well as equipment and supply assistance to operative agencies such as OCEAC, FAC, OCCGE and CDC.

In summary, a project proposal was developed by AID in response to needs and programmatic approach as developed in council by the ministries of some 20 Central and West African countries and WHO-Brazzaville. It was proposed by AID that this assistance be done in two phases, and that Phase I be carried out by a small West African based staff, backed up by short-term consultants, addressing three of four identified activity areas terminating in a plan for an operative Phase II.

The Boston University Medical Center has been keenly aware of and responsive to community health care problems over the past seven to eight years. Even prior to this most recent accelerated interest, community involvement had been demonstrated through the Departments of Psychiatry and Community Medicine (formerly Department of Public Health and Preventive Medicine), and a Home Medical Service has been extant for approximately 100 years. In response to the wave of humanitarian concern which passed through the land in the late 1960's, the Boston University School of Medicine developed a Department of Community Medicine (as did many other schools) and, in partnership with an adjacent area of inner city deterioration (Roxbury), developed an OEO neighborhood health center. The Project Director of the Neighborhood Health Center and the Department of Community Medicine became one and the same person (David M. French), and a tremendous amount of experience was gained in the identification of health problems to medically underserved populations and the development of health care programs to meet such previously unmet needs. One felt like Christopher Columbus setting out in 1492 on a vast uncharted sea, with almost nothing as a guide except one's gut feelings and the newly stated egalitarian principles of OEO. Metropolitan Boston and Massachusetts proved, however, to be one area where such innovations could prosper, and the playing of a leadership role by Boston University, its Medical Center, its

Department of Community Medicine, and certain individuals within the latter have been invaluable. Not all has been positive in terms of what has been learned, but it is safe to say that a framework for the assessment of the needs, the setting and the population, as well as the analysis and subsequent development of models, have been established.

In order to carry out the 20-country project as proposed by AID, we plan to use the resources of two institutions, the Division of International Health Programs of the American Public Health Association and the Office of Community Health Affairs of the Boston University Medical Center. The Division of International Health Programs has had a six-year experience around the world as a consultative resource, as well as more recently as a developer of low-cost health delivery models (DEIDS Project) in developing countries in Southeast Asia and Central and South America. Its consultative resources have been broadly used by AID and others in assessment and evaluation of health care needs and programs, especially in the less developed countries. Boston University, in addition to a large medical center allied with a large city hospital complex, has a School of Nursing, a School of Allied Health Professions and vast other resources throughout the university complex. Of great importance is a university commitment to education and studies of a practical nature in comparative economic and social development related to developing countries. The African Studies Center is one of the oldest and most distinguished in the country, and, in 1972, a new Center for Latin American Development Studies was established. New direction has been given to the African Studies Center with the appointment of a new director in June, 1975, and the acquisition of a Ford Foundation Grant making it possible to embark on a three-pronged program in: (1) Social Structure and Rural Development Policy, (2) Health Policy and Delivery of Health Services, and (3) Population Distribution. Collaborative effort between the African Studies Center and the University Medical Center, which will allow broad university participation, cutting across usual divisional lines, will provide a most unusual consultative base for this project. We will thus be able to draw upon resources from the Economics Department, the Political Science Department, the Law School, the Department of Anthropology, the Department of Sociology, the Department of Geography and the Health Management Program of the School of Management. Each of

the foregoing have unusual or indeed unique resources already previously experienced in international development.

Operationally the project is designed to have an African operational base with a small staff of six. On the one hand, this staff will interface with the Regional Advisory Council (composed of the health ministers of the 20 member countries) and WHO for direction, and, on the other hand, with the Office of Community and International Health Affairs of the Boston University Medical Center for consultative backup. Likewise, the African Operational Base will interface with the Division of International Health Programs of the American Public Health Association for further consultative backup, program evaluation and logistical support. A staff coordinating body of at least three persons, appointed and agreed upon by the American Public Health Association and Boston University, shall function in a review capacity to facilitate the integration of the operation of the two organizations. In addition, this program shall fall under the purview of a university-wide Committee on Development Studies, providing the institutional vehicle for collaborative work across disciplinary and regional lines.

As per the Statement of Work developed by AID, three program areas are identified: (1) Public Health Planning and Administration, (2) Training (manpower development), and (3) Data and Disease Surveillance. We have further identified three kinds of activities to be pursued relative to these areas: (a) assessment, (b) design, organization and development, both of which apply to all three above areas, and (c) training program development, which applies only to the Manpower and Data and Disease Surveillance areas. The assessment and the design, organization and development activity inputs will be backed up by consultants of three categorical types: (i) Health Care (MCH, nutrition and community health), (ii) Administrative (Public Health Administration, Health Management, and Fiscal and Economic Management), and (iii) Societal (development economists, geographer-planners, socio-anthropologists and legal-political specialists). In the area of Data and Disease Surveillance, additional consultative input is proposed from epidemiologists, demographer-biostatisticians and data systems specialists.

Based on previous experience in developing countries and the information received relative to needs as articulated by the Council and WHO, we have responded by

designing the foregoing format. Undoubtedly, after the program is initiated, the need for changes will occur, and flexibility will be maintained throughout in order to improve our ability to respond more effectively to expressed needs. Twenty countries to be covered in depth in two years by our limited resources is a veritable impossibility. This suggests that more will be done in some than in others, and this is a reasonable expectation, since requests for assistance will certainly vary quantitatively as well as qualitatively.

There is no doubt that our input will be directed toward delivery program development at the village level as we plan for Phase II, and this appears to be mandated by the 20-country council. This means that manpower development will be directed toward paraprofessional roles trained to deliver care, which has prevention as its ultimate outcome.

As the program progresses, consultants will undoubtedly discover within their areas of expertise programs which they could develop appropriately from within the University. Likewise, the American Public Health Association's commitment to development of low-cost health delivery projects in developing countries will be most appropriately situated for realization in Africa. These could well relate to African educational institutions as well as government. Such would be encouraged and developed under other funding as appropriate. Graduate and other students from either side of the Atlantic no doubt will have much to add. The only criteria to be met would be project definition, indicating it to be (1) functional for the country(ies) involved and (2) related in a general supportive developmental sense to the core project's goals. With this in mind, the University has indicated a willingness to invest some of its own resources initially to help get the ball rolling.

This paper has dealt with the historical background behind the consequent development of a regional international health project getting underway in Central and West Africa. This regional project is a multi-donor response to the expression of needs of some 20 health ministries acting in council with the mediation assistance of the Regional Office of WHO in Brazzaville. The proposed input by the USA through AID is being contracted to a collaborative effort between the American Public Health Association and the Boston University. The initial

Phase I (two years) will utilize consultants to assess, analyze and propose approaches to health care development in the individual countries in a regional context. An operative Phase II, to follow, will be developed as a natural outgrowth, reflecting previous thought and planning in collaboration with the ministers, their council, WHO, other donors and other programs. A planned ongoing program of evaluation by the American Public Health Association should contribute much of value for future use in other international health development projects of a similar nature.

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PANEL WORKSHOP
Health Program Development:
International Assistance

James C. McGilvray, Chairman
Mary R. Dewar
William Oldham
Howard P. Rome

JAMES C. McGILVRAY

You and I have an imposing array of experts available to us this afternoon, who will tell us how that very necessary ingredient of financial assistance might most appropriately be applied to the promotion of primary health care. Our mandate for this panel requires that we examine past experience as well as future roles for international organizations. I would hope that we do not make too much of past failures, except insofar as these have led to new insights about our role for the future.

We are all aware of the tremendous imbalance in the health services of developing countries, where as much as 80 percent of populations are deprived of access to health care facilities and manpower. The focus of our presentations, therefore, and of our subsequent discussion should be directed to the question of how international assistance might redress this imbalance and injustice, and to serve those who are presently deprived. As director of the Christian Medical Commission, I think it would be appropriate if I began with a text, "What man is there of you, whom if his son asks bread, will he give him a stone? Or if he asks a fish, would he give him a serpent?"

We are caught in a terrible dilemma. While, on the one hand, we recognize the need to develop primary health care if we are to serve those many millions of our fellows who are presently deprived of health services; on the other hand, those nations which can afford to extend assistance are the very ones which exported the existing system and gave it such international prestige that the majority of the less developed nations are vainly trying to copy it. Their slow rate

of economic growth and growing populations make the equitable distribution of facilities practically impossible short of the millenium. Unless we are first willing to acknowledge our faults, it is likely we will continue to give stones and serpents instead of bread and fish.

I was present at the Executive Board of WHO and was privileged to participate in the debate when the primary health care strategy was first introduced in January of this year. The original paper had laid stress on the need to promote primary health care in the developed, as well as the less developed countries. But, all reference to the developed countries was later omitted at the insistence of their representatives. Apparently, we are still unwilling to admit that many millions are still deprived of adequate health services in our own countries. Nevertheless, in spite of this omission, the policy still contains many explosive characteristics which we cannot afford to ignore and which will hopefully affect the character of international assistance.

It begins with a confession of failure--that most health care systems are designed by professionals largely for their own satisfaction and are not what the consumers want. The logical outcome of this would be that we no longer deal with ministries of health in negotiating assistance, since these ministries are hotbeds of professionalism. The policy paper goes on to the proposition that primary health care should be designed very largely by the communities to be served and should reflect their culture and life-styles. It further states that all other echelons of health services must now become supportive of the primary health care priority. While I fully agree with these propositions, I do not see how international assistance, which is most frequently on a government-to-government level can reach to these communities, or even begin to change the priorities within the present systems, unless there first exists a strong national will to do so. We have not been very successful in changing our own priorities. While every medical school now has its department of community health, it is usually housed in some temporary quarters at the back of the main building, which exemplifies its ranking in the hierarchy of our medical priorities. Attempts have been made to induce people conditioned by the present system to change the system itself, but these have also failed. Dr. Joe Wray of the Rockefeller Foundation, who tried it for eight years at a medical school in Bangkok, Thailand, admitted to me recently that it was a failure. All the students took

the ECFMG examination! He is now convinced that the system itself must undergo radical change. Yet this is unlikely to happen without some radical political and structural changes in those countries we are anxious to help. Yet the constraints of our own mandates may prohibit us from giving aid to countries whose political philosophy must undergo such radical change if primary health care is ever to become a reality.

The primary health care strategy relates changes in the present health system to innovations such as the use of front-line village health workers and indigenous practitioners for the promotion of primary care. We have several examples of these in the form of projects, and, by and large, they are successful. Unfortunately, they are carried out as isolated activities, separated from the ongoing hospital-based systems which absorb most of the capital and recurrent budgets. It would be tragic if we simply continue to support only those projects which we can identify as primary health care strategy at the cost of effecting radical changes in the whole system. The danger is twofold. We might end up with several islands or models which have effected no change whatsoever in the present national priorities, even though they provide answers to the problems. On the other hand, we might easily create a two-tier system; one for the minority, with access to a highly sophisticated system, and one for the remainder of the population. If this should happen, a policy which was justified in the first place by the tragedy of the poor and the deprived, ends up by benefitting the rich.

During the past eight years, the Commission with which I am associated has been involved in several experiments which have attempted to match scarce resources against the need for effective health care for the maximum number of people, and we have learned many things. Let me list some of those which we have shared with the governmental and nongovernmental development agencies which use our services for evaluating their health projects. The first is that, while it is true that approximately 80 percent of developing country populations have no access to health care facilities, the provision of such facilities would have minimum effect unless these communities were assured a sanitary environment and adequate nutritious food. It is the lack of this protective substructure in the environment, rather than lack of medical intervention, that makes a great part of the world's population subject to the constant threat of infection. Secondly, no matter how

imaginative or economically viable the health care project may be in the eyes of the designer, it will not take root if it is designed for people rather than with them. And yet, while community participation in the design of, and decision-making about, a health care programme is imperative, it is also very frustrating, because health is seldom a high priority among the felt needs of the community. We have also learned that the closer to a bare subsistence level the community is, the less its expectations that assistance such as medical intervention will be of any benefit at all. Yet even while we know these things, we have seen very little indication that any country is willing to apply them or give the necessary priority to the establishment of primary health care. The constraint is not economic, nor is it technological; it is political, and it is entrenched by a professional elite that is unwilling to give up the rewards which the present system ensures. Let me give you an example of this dilemma.

The World Bank recently decided to advance Bangladesh a loan of 45 million dollars to be spent on health and family planning. Much of it will be spent on buildings, some of which could be provided by the rural communities themselves if they could be motivated to do so. Much of it will be spent on expensive programmes to produce doctors and graduate nurses who have little idea of their own people's needs. Bangladesh, under its present and previous political identity, has thus far produced seven thousand doctors. Fifteen hundred have gone to the developed countries, whose medical needs they have been trained to care for in the first place, because medical education in Bangladesh is still modelled on the British pattern of the 1940's. At least 3,000 of these doctors are established in the urban centers like Dacca and Chittagong. That leaves 2,500 for all the rural areas, or an average of one doctor per 28,000, even if they are evenly distributed, which they are not.

Most of the diseases in Bangladesh are due to parasitic infections, many of which are water-borne, together with diseases of the skin. There is a high incidence of gastroenteritis and scabies and the like. Yet, in Bangladesh, doctors know much more about the treatment of thrombosis and how to use a cardiac monitor. In the medical school textbooks, the treatment of scabies requires a "bath in the evening" before application of the recommended ointments. Yet, the poor in Bangladesh have either too much water or none at all, and nobody ever bathes in the evening for fear of catching pneumonia!

On the other hand, several projects in Bangladesh have demonstrated that 65 percent of the country's medical needs can be adequately met by village health workers with a few months' practical training, together with continuing retraining. These people do not need expensive housing, nor do they expect elitist schools for their children and supermarkets for their daily needs.

How then do we resolve this problem? Let me suggest some possible solutions as topics for our general debate.

1. Our first concern should be the creation of a national will to develop primary health care for a total population as the first priority. Without such a national commitment to change, our models simply provide answers to questions which were not being asked. It may require bypassing the ministry of health to seek the highest level of government.

2. Where such a national will for change cannot be expected, we should concentrate on agriculture, housing, sanitary measures and health education, which will probably contribute more to health than the upgrading of hospitals. This would be my understanding of option number one proposed by the World Bank.

3. We should declare a moratorium on the funding of sophisticated and highly technological facilities until there has been a demonstrated will to build up a network of primary health facilities which will make them relevant.

4. We should stop exporting our models, which are usually inappropriate and much too costly.

MARY R. DEWAR

We have been hearing a great deal about the trends in the setting of priorities for health care and in the delivery of health care to meet these priorities. Now we come to consideration of the ways in which international assistance may facilitate the meeting of these same priorities.

There are a number of assumptions or constraints that set, or might set, the boundaries of aid. I'd like to list some of these and then comment on the implementation of a few of them. They are drawn in part from the principles that formed the basis of discussions between the World Health Organization and the Christian Medical Commission of the World Council of Churches in Geneva, Switzerland, and they have been developed by both, together and separately, out of their own studies.[1]

Assumptions underlying assistance in health care:

1. Health care should be shaped by the cultural life-styles of the target populations.
2. It should be in line with the philosophy of health, healing and illness of said population.
3. Its delivery should be within the economic resources of the area involved, be it nation or region.
4. It should fit into the national or official structures for health care.
5. It should be coordinated within the private sector with some degree of overall planning.
6. It should be provided for, wherever possible, from international or multilateral sources, not bilateral backing of one donor in one country to one recipient in another.
7. It needs to be community-oriented, aimed at improving the community's health.
8. It should have consumer input, from those for whom the health care is intended.
9. It should go hand in hand with other non-health programs as a multidisciplinary effort to help a community meet its needs.
10. Most of the personnel to provide the care should be generalists in job description and in training, at whatever level they function.

Assuming that these principles serve as guidelines for the private agencies in their policy decisions, what are some of the implications?

Donor agencies should consider seriously the value of coordinating their separate health programs in countries or regions of countries where they are at work. There are already 12-18 such coordinating groups in various stages in Africa and other regions of the world. Since they are difficult to budget for in the beginning, here is a place for funding, assisting existing agencies with personnel and funds until they are on their own, or helping fund workshops where agencies do not exist so that a climate for forming one can be developed.[2] In this fashion private programs can do some overall planning, execute some economies, contribute to the national health service and participate in distributing health care to the whole population. One might allocate further funding for training of locally selected persons to head up these agencies. This might include inter-field visits by these persons.

Again, workshops might help to develop enthusiasm and ability to collect raw data about health, so that information becomes available for future planning. The most successful person I know at making a start at raw data collection of demographic and vital statistics sitting waiting for someone to put it all together is Ms. Marabelle Taylor, R.N., in the Cameroun.

Funding might also arrange for seminars of the directors of these coordinating agencies.[3]

Again, if consumer input is important, and it is thought to be vital, it may need to be helped into useful existence by workshops, seminars, or conferences to develop consumer participation and responsibility for health care decision making. These conferences need to be funded. There is also room for pilot projects and role models tried out by the private sector in selected areas to iron out the kinks.

Health care in its narrower sense does not often change the health patterns of a community. But when combined with agriculture, all-weather roads, safe water, food, etc., remarkable improvements in health occur. A well-known example at present of this approach is that of the Aroles[4] in India. I would put in a special plea at the moment for the newly independent nations of Africa, namely, Mozambique, Angola and Guinea-Bissau, who were previously controlled by Portugal and had little capital to invest in services. When the new national governments set up their health services, and private and official agencies offer help, I would hope that here is a special opportunity for coordination in planning and programs. The central plateau of Angola

has for years had a multidisciplinary village program called the Betterment of the People (Melhoramento do Povo) which included village health workers (enfermeiros), combined with church leaders, schools, literacy programs, irrigation ditches, water supplies, latrines, tiling of floors and roofs, agricultural programs for soil conservation and animal husbandry, nutrition and household arts programs. These are self-supporting, except for the training of the leaders and some of the supplies. Such a program should be encouraged and built into the nationwide system. Hopefully, relief and crisis help will be planned so as not to destroy such far-reaching self-supporting community programs.

Since I am speaking for myself and out of my own experience, I would like to plead for an international or multilateral approach to new projects by the private sector. A bilateral approach, with the donor agency in the U.S.A. and the receiving community in the Third World, for example, cannot escape the taint of the powerful using power for their own purposes, even if in the guise of "unselfish" help, and the powerless feel frustrated and often betrayed. Even to ourselves, we Americans are no longer the virtuous givers of gifts from our plenty, but we are power-hungry and ready to preserve ourselves at the expense of others.

Anything we do has to lose a share of its effectiveness because of this political reality. So I would urge the use of international agencies for sponsoring projects and administering the funds. At least there is a greater chance that Third World voices will be heard on a more equal footing in the decision making, and no one group can be accused of securing its own ends other than the ones openly proposed. Again, I make this plea for Angola and Mozambique that private American agencies work through international agencies rather than each for himself, and that the donor strings be decided not just in the donor agency but in some group where recipient voices are represented. Our own good health is partially built on other's good health, and none of us can be healthy unless all of us on the globe have more equal health.

And, finally, there is a great emphasis on primary care centers to be staffed by all kinds of workers, called by many different names. They are to come from the community and be trained in different ways, but almost never on the long expensive doctor route. These health workers will need to be generalists for the problems of their areas, combining prevention with curative work.

Some of the primary tasks already clearly useful in all parts of the world involve nutrition education, maternal-child health, midwifery, under-five clinics, family planning, etc. The experts in planning and delivering this kind of care are often not doctors, though they may be, but other health professionals: midwives, nurses, nurse practitioners, nutritionists, etc. I would propose that it is time that the consultants or professionals appointed by private agencies (also government agencies) to plan, direct, consult and make decisions be these other professionals with the expertise, and not necessarily doctors. Many are appointed to carry out these tasks who have the special training necessary, but usually the paid executive who is setting policy is a doctor, a man, and even often a surgeon. I would propose that agencies appoint executives entrusted with policy-making in health for their expertise in primary health care at the generalist level, including women and non-doctor health professionals, and then listen to them as executives, and not just as employees, to report and implement programs.

And I would suggest that primary care personnel be trained in their own countries, with donor funds used to set up workshops, or translate, or publish textbooks. If the trainee is to be brought to an industrialized nation such as ours, then let his training be not in the great university teaching hospitals, with their urban technologies, but in rural situations more like their own, with personnel in charge like nurse practitioners, midwives, et al. I suggest rural programs like SAMA in Appalachia, Lend-a-Hand, the Frontier Nurse, nurse practitioners in Minnesota and North Dakota, the Delta project in Mississippi, etc.

I have tried to make some comments related to implementing the guidelines, and I have not exhausted the possibilities, nor mentioned that many of these things are being tried here and there, and many other ways also exist for offering international assistance in health.

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of the successes and the problems involved.

3. Ibid. and also the Annual Meeting 1974 Minutes, Christian Medical Commission of the WCC, July 1974, p. 13.

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HOWARD P. ROME

Although the immediacy of the tangible problems of disease and the corrosive effects of malnutrition are stark realities which are difficult to ignore, there is abundant evidence that they are, in a significant measure, effects of what might be called a systems failure. It goes without saying that the health care system of any nation is both directly and indirectly dependent upon each of the related and interdependent facets of the educational-political-economic network which constitutes the social infrastructure of every society. There is a high correlation between anomie and all the standard indices of disease. However, for the most part, this has remained a more or less academic observation, the desperate plight of the visibly sick and the palpably malnourished blurring needed attention to the root cause of the more tangible problems. Health consequently is an ecosystem phenomenon. It cannot be assessed in a social vacuum.

By the same token, what is construed to be the mental health state of a society has to be viewed in the context of its state of development. Consequently, the resources and standards that are considered adequate for mental health services in the developed nations of the world by no means can be taken as criteria for the developing nations. A laggard recognition of this fact has led to the adoption of innovative practices in the provision of direct mental health services in rural areas. Western medical practice is beginning to learn to share its claim to professional autonomy with native healers, indigenous workers who have been recruited to its ranks, as well as a growing host of paraprofessionals.

Specifically, since the end of World War II, the practice of psychiatry all over the world has ramified throughout the communities it seeks to serve. Previously, its ministrations were confined lately to those practiced in hospitals which had been converted from the isolated asylums of the 19th century Western world. The developing world's professionals, trained in Europe in large part, modelled what meager care they were able to provide on the asylum-hospital model. This resulted in a caricature of what was intended by the French pioneer alienists' era of the Enlightenment. Mental patients were confined in what amounted to warehouses, with nothing or very little in the way of the "moral treatment" which is what ostensibly was being initiated. This was the imposition of colonialism at its worst.

In partial justification, it must be said that in most instances this was not purposeful but rather inadvertent. The mental institution concept was a foreign element engrafted on developing society; adopted without due regard for the ancillary requirements--the prerequisites of a sufficient cadre of trained professionals and subprofessionals; of community support based on an understanding of what was intended; of financial appropriations; of a legal system which appreciated the rights of humane treatment; of an educational system which would supplant the superstitious notions of mental illness by modern medical knowledge.

It must be said that the developed world, supposedly enlightened, was itself guilty of the same neglect of the mentally ill. The standard of care in public mental hospitals especially had fallen to the scandalous state that was brought to public attention in the 1940's. Then too, for the first time the magnitude of the out-of-hospital mental health problem--the walking sick, and the occupationally unfit--was delineated in the United States and Western Europe. Post-World War II was a time of accelerated interest in health matters generally, and mental health shared in that benefit.

The strictures of war had led to innovative psychiatric practices in Great Britain, particularly; these were readily adopted in the United States. Group treatment in an outpatient ambulatory status led to the creation of community centers, for it was finally recognized that confinement in large hospitals removed from community contact was counterproductive. In turn, this programmatic shift permitted the establishment of psychiatric units in general hospitals, both with attached and separate outpatient facilities.

This model of expansion of mental health activities was stimulated by increased public support, increased public education, and increased research budgets. It coincided with a worldwide political move of decolonization and an accompanying resurgence of native cultures. This permitted a reassessment of practices of all kinds and a move to develop more appropriate models of health service.

The stimulus that came from the synthesis of a new class of psychotropic agents cannot be overestimated. It lessened the public fear of the potential "danger" of the psychotic being at liberty in the community. Moreover, its beneficial effects are to be perceived in the salutary influence this new and effective treatment

had on the professionals as well as the public at large. It has lessened to some degree the stigma that appends to the mentally ill.

In an era in which the diffusion of scientific-medical innovation links all sectors of the world in a communications network, it is easily understood that the developing nations of the world are able to choose those advances in the care, treatment and rehabilitation of psychiatric patients which are more appropriate to their culture, and within their resources. Furthermore, international collaboration now is an integral part of the foreign policy of most nations as well as civilian groups. The World Health Organization with its regional offices assists in facilitating this arrangement. There is also a network of lay and professional people who compose the World Federation of Mental Health.

The World Psychiatric Association was founded in 1961. Through the agency of its regional symposia, its scientific sessions and its world congresses, it coordinates on a worldwide scale the activities of its 79 national member societies, representing more than 75,000 psychiatrists in all parts of the world except in the Peoples Republic of China. It strives to strengthen relations and facilitate interchange among psychiatrists who work in the diverse fields that the practice of psychiatry now embodies. The World Psychiatric Association has working relations with the World Health Organization, UNESCO and other international organizations. Thus, it is an international vehicle for the interchange of professional information.

Insofar as concerns the intention of the World Psychiatric Association in the sphere of international assistance, it attempts to implement an unstated policy by its efforts of convening many seminars and symposia yearly at various places in the world. It provides speakers of international renown to participate with local professionals and paraprofessionals and discuss topics of current interest. Thereby, it stimulates as it cross-fertilizes, communicating those ideas which are germane to seed themselves in the practice of psychiatry generally.

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PANEL WORKSHOP
Integration of Health Services:
Family Planning and Nutrition

Frank L. Goffio, Chairman
Stephen C. Joseph
Leon O. Marion

STEPHEN C. JOSEPH

Health workers concerned with problems of morbidity and mortality in developing countries have found themselves in recent years in the uncomfortable position of being critized simultaneously from two opposite sides of the same issue: "Can the investment in improved health services in a developing society improve the health and quality of life in that society to an extent commensurate with the difficulties and costs of that investment?"

From one side, concomitant with the increasing recognition of local, regional, and global ill effects of rapid population growth, health workers were, and are, often described as a major "part of the problem"--adding to increased pressure on scarce resources by reducing mortality in societies that have not effected the demographic transition from traditionally high death and high birth rates to low death and birth rates.[1] Thus, in the view of many population policy advocates in the 1960's and early 1970's, there has been an "either-or" relationship between family planning and health services programs.

From the other end of the firing line, especially as the magnitude of nutritional deprivation in early childhood in the developing world becomes more and more apparent, there has been increasing concern that health services per se, particularly clinical health services, have little effect on the underlying causes of high morbidity and mortality, especially when compared to more basic determinants of nutrition and economic status.[2,3] Thus, according to these arguments, investment in health services may drain off scarce resources from more fundamental growth and economic development activities.

Further, despite continuous articulation over the past decade of the position that health services, especially those for children and mothers, need be integrated with family planning services, if the latter are to be acceptable and sought on a mass societal scale,[4,5] there have been those who have argued that the urgencies of curbing national and global population increases are such that family planning programs (usually taken to mean voluntary acceptance of child-spacing or pregnancy-limiting measures) would prove inadequate, and that governments should and "must" embark on programs of population control (usually taken to mean a bypassing of individual and family choice in the matter).[6]

In this context of general antipathy between family planning and health services, especially on the part of governmental and private "donor" organizations in the affluent countries, the past decade has seen a massive funding of family planning programs in the developing countries. Without question, this effort has led to major increased understanding of the behavioral, demographic, and technological dimensions of the world population problem, and what might be done about it. What are some of the associated outcomes to date of this increased knowledge and its applications?

Many countries have articulated and adopted official population policies; 80 percent of the developing world's population lives in countries with official Family Planning Programs, and 90 percent of the population of Asia lives in countries that have a national policy aimed at decreased fertility[7]; similar developments have been slower and less pronounced in Africa and North, Central and South America. In the past decade, 72 countries have shown a decline in fertility, 17 of them by as much as 10 births/1000 population.[8]

However, the current annual growth rate of populations in the developing countries is about 2.5 percent, which means a population doubling-time of approximately 32 years, compared to 83 years in the affluent countries, where population growth rates are less. There is growing skepticism that a simple continuation of present efforts, even with an increase in program resources, will significantly decrease the world's rate of population growth.

Further, spokesmen for the poor nations argue that increases in the number of people do not by any means reflect the whole story; that the disproportionate consumption of wealth and non-renewable resources by the

inhabitants of the affluent countries more than offset their slower rates of population increase.

Proponents and critics alike of the push for population control agree that no corner has been turned in the attempt to achieve a balance between man's fertility and the resources of our planet. In addition, one can cite disturbing recent portents that suggest a worsening situation. Among others, these include:

1. increasing evidence of environmental pollution and decay, in rich and poor countries alike;
2. recent actual and near-famine (e.g., the Sahel, Ethopia, India-Bangladesh), and a month-by-month concern with the adequacy of global and national food supplies and reserves to meet short and long-run nutritional needs;
3. increasing articulation, in the affluent countries, of "lifeboat," and "triage" ethics, and discussion of the use of food as a strategic and political weapon;
4. growing awareness that we have made virtually no progress in understanding or affecting the problems of population migration and distribution, especially problems of rapid slum urbanization and rural human-resource depletion in poor countries.

Thus, despite the efforts and advances of the past decade, there remain at least five major generic problems blocking a significant reduction of pressure on the earth's scarce resources by way of a decrease in population growth rates. These are:

1. Inadequate understanding of the psychological and cultural factors that influence fertility and migration. It is unlikely that family planning programs can reach the masses of the world's families, especially those of poor rural areas, or sustain positive motivations for decreased fertility, without a much more detailed understanding of these factors t' n at present exists.
2. Inadequate infrastructure and "delivery systems" by which to make and sustain contact with both rural and urban populations, especially those of the poorest "Fourth World" countries. It is in this problem area that the greatest challenge lies to the potential integration of family planning and health services in situations of extreme resource scarcity.
3. Inadequate contraceptive technologies, truly

mass-applicable in terms of effectiveness, safety, cost, and acceptability. The development of a long acting (reversible) male contraceptive meeting these criteria would provide a large step forward.

4. Inability of national and international bodies to increase the distribution of wealth and well-being (including health) among high-mortality, high-fertility, impoverished populations.
5. Inability to convince and assure Third and Fourth World governments and populations that the family planning assistance of affluent countries is not based on racist, imperialist, or conspiratorial motives.

Though the corner has not been turned concerning the fertility/resource dilemma, another related corner has been turned in very recent years, one which requires a major reevaluation of the philosophic, as well as the strategic and tactical, basis of family planning, health, and nutrition programs, and their relationship to national and international development. This "turned corner" relates to a powerful new perspective on the distribution, control, and utilization of the earth's resources, both within and between nations and population groups.

To illustrate this new perspective, one can cite four major and interrelated world dialogues engaged in during the last few years. The U.N. Conference on the Environment, held at Stockholm in 1972, led to the establishment of the U.N. Environmental Agency in Nairobi (the first U.N. Agency to be headqaartered in the Third World), and opened a new perspective on the conflicting priorities among, and between, the rich and poor countries' views of the trade-offs between industrial "progress" and environmental despoilation.

The U.N. Population Conference, held at Bucharest in 1974, provided the forum for an articulation of the point of view held by many developing countries that family planning and population control must be engaged within a context of, and at least partially as a by-product of, socioeconomic development, rather than as a prerequisite.

The World Food Conference, held at Rome in November 1974, emphasized the magnitude of [illegible] nutrition problems and the need for international collaborative attempts at solution.

The developments in the U.N. General Assembly in the autumn of 1975, related to a "call for a new

economic order," reflect global changes in patterns of wealth, political leverage, and a demand by developing countries for what has been termed a "shift from hierarchy to symmetry."[9]

The dynamics underlying these and other developments make clear that a quantum shift is taking place in the relationships between nations. Beyond the surface factors of global politics, control of energy resources, and the like, this shift is based on more fundamental and long-lasting changes that have crystallized in the past four decades. Foremost among these changes are: the positive and negative effects of man's increasing ability to control and exploit his environment; the increasing interdependence and time/space proximity of all human groups and societies; and an increasing recognition that the behaviors and technologies that used to be thought of as belonging to different "sectors" are inextricably interrelated and, indeed, cannot be dealt with separately.

What does this changing context mean for health workers concerned with the developing countries? Until quite recently, most of the emphasis of programs aimed at improving the health status of population in the poor countries followed what might be thought of as a "growth" strategy, with emphasis on categorical programs of disease control, and attempts to increase the production of traditional health workers (especially physicians) and facilities (especially hospitals and clinics).

Very recently, there is beginning to be a changed emphasis towards distribution, with calls for increased attention to the spread of low-cost basic health services, especially in rural and impoverished urban areas, utilizing larger numbers of less-trained personnel and simplified mass-applicable procedures, equipment, and facilities.[10, 11]

One can draw a clear analogy between this shift in health services' focus from "growth" to "distribution" with parallel thinking among development economists.[12] Both streams can be traced in a context of recognition of resource scarcity to the three quantum changes described above.

In general, despite this increasing attention to distribution in situations of resource scarcity, health workers have not been concerned with overall community or national development, except as reflected through their own narrow window of health services. Perhaps this has been because of a sense of powerlessness to effect health-promoting social change through economic, political, or environmental means (this is rather

puzzling, since it is in the health sector more than any other that we have evidence that health measures per se have historically done far less to decrease morbidity and mortality than have changes in the other areas mentioned).

One can confidently predict that this parochial view of "our sector" must change rapidly in the decade ahead if we are going to compete successfully for the scarce resources available for development, and to use these resources in the most effective and efficient ways to promote and improve health. Integration of program efforts in health services, family planning, and improved nutrition is only the first of many necessary steps into a much broader arena. Workers concerned with health services in the traditional sense will need to develop new technologies through basic and applied research, explore new modalities of education and training of health personnel and the broader community itself, and design new and quite different mechanisms of delivering health services. Most of all, we will need to find ways in which all of the above can be justified and implemented within a context of overall development needs. This will require increasing attention to cost, increasing attention to application and distribution, and increasing attention to the broader community context of all that we do (especially with regard to nutrition and population).

We are going to have to learn to communicate with, negotiate with, and persuade, in much more fundamental ways than previously, the local community and the societal policymakers, as well as a diverse array of technologists from other disciplines. The common language and shared definitions of this language for communication are as yet largely nonexistent; the development of this common language remains a challenge to health workers that surpasses in immediacy all of the more familiar problems that face us.

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LEON O. MARION

The Conference Planning Committee has put together two interesting themes for consideration by participants. The overall theme is Primary Health Care: Models for Development. The particular focus of this workshop within this theme concerns the integration of health services with an eye on family planning and nutrition. These general themes point to a labyrinth of paths which might be followed. This paper considers only one of these paths, that of the involvement of the voluntary agency and mission groups.

In order that we might all be thinking about the same definition of a voluntary agency, allow me to give the definition which has been accepted by the American Council of Voluntary Agencies for Foreign Service: "a nonprofit organization established by a group of private citizens for a stated philanthropic purpose and supported by voluntary contributions by individuals concerned with the realization of its purposes."

To provide necessary background for understanding the involvement of voluntary agencies in the health service field, perhaps it would be helpful to sketch an historical perspective of the self-identified role of voluntary agency and mission program development.

As the early missionaries went into what for them were the far reaches of the world, their charge was to "bring religion to the heathen." This implied a religious motivation which had many by-products, one of them being the integration of various functional sector components, now defined as development assistance. Almost at the same time, and especially immediately after World War II, secular nonprofit institutions with altruistic motivations became interested in sharing the vast array of U.S. resources, much in the same way as the United States Government's Marshall Plan. Some would argue that in sharing resources, both private nonprofit entities and the public sector not only were somewhat arrogant in identifying the host population's problems, but also had the audacity to prescribe the cures without sensitive consultation with their hosts. Both the public and private sectors, after the flow of millions of program dollars in the name of humanitarian assistance, are realizing that the supposedly fully identified problems are less identifiable, highly complex and entwined in the delicate social, economic, and political fabric of overseas populations.

What were some of the sociological, cultural, and attitudinal changes which took place? Let us begin with the mission endeavors. To bring religion to a selected population required missionary zeal; however, to accomplish this goal there was need of the sending group to learn about the targeted culture. A lesson learned by the early missionaries has been a salient feature of development assistance during the past decade. In the case of secular institutions, including both private and public, an important motivational factor was humanitarian in nature--this is not to say that other factors, especially in the public sector, were not in operation, such as international political considerations.

It has taken over 15 years of the development process to recognize that both the public and private sectors must be more humble in identifying what the needs and cures are in a host country. We now are in the latter half of the soaring seventies, supposedly fully equipped to confront the world's problems. Our tool kit includes computers, logical frameworks, interface entities, millions of pages of especially commissioned research papers, information/dissemination centers, and thousands of experts in almost every sector of human, animal, plant, atmosphere, and outer space endeavors. With all of this, we are still just approaching the threshold of finding the way to solve some of the pressing problems of the world.

As we struggle with various development assistance alternatives, we are becoming more and more aware that the chosen developing population really involves human lives. Another realization also taking place is that our scheme, our plan, will not work without the significant involvement of the indigenous population. This new-found international maturity demands patience, tolerance and a deep measure of understanding.

Against this background, what is the financial involvement of nonprofit organizations overseas? In the latest annual report of the Advisory Committee on Voluntary Foreign Aid, it is found that the figures given for 94 U.S. nonprofit organizations for the 1974 fiscal year amounts to just under one billion dollars ($949,174,717). This represents a healthy increase of something in the neighborhood of $250,000,000 over the same year in FY 1973.

What does a voluntary agency program have to offer? I would ask that you might consider the following:

1. Flexibility. Private nonprofit agencies have

the ability to be flexible in their arrangements when negotiating with host officials, other voluntary agencies, and international organizations.

2. Innovation. For the most part, voluntary agencies and mission groups have the ability to attempt new project designs and plans. One of the reasons this is possible is due to the fact that in most cases resources for a new project will be relatively small in relationship to government-to-government projects, and, therefore, the risks are small. Rarely is it possible for a voluntary agency to assume responsibility for a program which might have disastrous effects on the host country.

3. Fast Action. In most instances, voluntary agencies do not have to find their way through a vast honeycomb of a bureaucracy to make program decisions. This is one of the reasons they have been of tremendous importance in international disaster relief.

4. Sensitivity to Constituencies. A voluntary agency must always be aware that in making policy and program decisions, those paying for the program feel they have a right to question and criticize what is being done by the agency; therefore, management of voluntary agencies is especially sensitive to constituent feelings. This is in contrast to the way government programs take shape and form, even though we would like to think that the Congress, as it represents the people, ask the necessary questions of United States Government foreign assistance programs.

5. Humanitarian Purposes. In most cases voluntary agencies describe their programs as humanitarian in nature. We would be naive to believe that there may not be political overtones in some program decisions, but we can be relatively assured that no voluntary agency program is instigated for reasons of political expediency.

6. Staff Practitioners. In the past, those who worked in the field overseas were expatriates. Rapidly, after a period of training, United States voluntary agencies are making more and more use of indigenous personnel.

7. Lessons Learned. After years of experience in working overseas, voluntary agencies have picked up those attributes which are now being discovered by the "avant guard" in development assistance. These attributes include patience, tenacity, acculturation, diplomacy, and sensitivity to local mores.

A new word has entered the development practitioner's lexicon--the word is "integration." The use of a particular word or phrase, as all of us know, will not solve

the complex problems confronting the world any better than words and phrases used in the past, such as "self-help," "people to people," "a generation of rising expectations," "development decade," and many others. Integration of health services in the area of family planning and nutrition is another way of stating that in the health field, as in other functional sectors, it is time for both public and private entities to address specific problems with an understanding of what is taking place in other sectors affecting these specific problems.

Allow me to detail some of the ways this activity is taking place within the voluntary agency endeavors, in only one country, the Philippines. In a survey conducted and published by the Technical Assistance Information Clearing House, dated July 1975, concerning the programs of U.S. private nonprofit organizations in the Philippines, it was found that some 90 organizations were involved. The total financial involvement of these agencies in the Philippines covering all functional sectors of programming amounted to $24,444,207. Alphabetically, the organizations involved ranged from the AFL-CIO Asian American Free Labor Institute to the Young Women's Christian Association. Agencies involved in health services per se, particularly those in family planning and nutrition, numbered only five. These five operated or supported operational programs as follows:

1. barrio adult education programs integrated with responsible parent, child care, agricultural, and nutritional programs.
2. Maternal/Child Health Centers emphasizing nutrition, pre-postnatal health care, and family planning projects combining fertility regulation information and multiple MCH services.
3. One agency made money available for an MCH family planning project as well as providing a grant to the National Federation of Philippino midwives for a conference on family planning and nutrition.
4. Another agency gave funds for an MCH family planning demonstration project.
5. A fifth agency reported that it provided United States AID with expert personnel to promote general nutrition and family planning programs.

Those who have worked with voluntary agencies over the years realize that programs instigated by these agencies can only be supplemental and complementary to the

work needed to be accomplished by the host government and its people. More activity must be directed to identifying the vast array of entities focusing on developmental problems in a particular country. This array includes not only the public and private sectors but also the multinational coporation and international organizations.

To be up to date on the various kinds of activities taking place in any one developing nation requires a considerable amount of monitoring and research. As a result, this is a continuing concern of voluntary agencies. It is hoped that more sensitivity to this developmental gestalt approach will begin not only to move all concerned to the threshold of meeting some of the population/food problems, but will place us well within the door of solving some of these problems.

PANEL WORKSHOP
Health Care Providers:
Dental Health

George M. Gillespie, Chairman
David E. Barmes
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DAVID E. BARMES

In the early part of this century as the quality of dental education increased, and in the third and fourth decades as comprehensive public dental health services began to develop, dental caries was the unrivaled number one enemy which had to be overcome to restore or maintain oral health. Justification for more manpower and services was usually based on statements which claimed that dental caries was as prevalent as any disease known to man and caused great suffering and hardship to mankind. In more recent decades, those who felt that dental caries had received more than enough emphasis and had taken a global look at the prevalence of oral diseases--so far as data allowed--began to point out that periodontal diseases were more prevalent than caries, even where prevalence of the latter was very high, and still seemed to be a major oral health problem in populations where caries prevalence was low to extremely low. They also pointed out that our lack of impact on periodontal diseases control and prevention meant that many resources were expended in some populations to save teeth from the ravages of caries, so that they could be lost at an early age due to periodontal damage.

This valid and important message soon gave rise, as is so often the case, to a fashion of pointing out that periodontal diseases for many populations were the important oral health problems upon which we should concentrate rather than on dental caries.

Now it is time to think over this sequence of action and reaction and to react to the reaction. First let us look at the global pattern of dental caries which has been pieced together from the dental epidemiological information program of WHO, and for which more and more

information becomes available monthly through use of WHO standard methods for dental epidemiology.

These data show us that two-thirds to three-quarters of the world's population have, at most, moderate caries prevalence. When that information is coupled with the knowledge that there appears to be no such variation in periodontal diseases, it would seem that we really ought to concentrate on periodontal health for the vast majority of the world's population.

However, our data fail to show a disturbing feature of increasing dental caries in those populations which once enjoyed near freedom from the disease. There is an unmistakable trend in recent data indicating that these increases, which can be six to twelve-fold, are occurring where urbanization and dietary changes are happening. It is hardly necessary to add that those changes are rapid and vast in the developing world. No similar alteration in population experiences of periodontal diseases are indicated by our data.

The prevalence contrasts, changes and lack of changes, provide a range of oral health situations which require certain modifications in approach for any specific population. However, that range can be simplified for our deliberations to two extremes. At one extreme there is the highly developed country with plentiful, if not adequate, dental manpower and high prevalence of both caries and periodontal conditions. At the other is the UN list of least developed countries where dental manpower is extremely scarce, periodontal diseases are common and dental caries prevalence is very low, but increasing.

The highly developed countries, typified by the former extreme may or may not have comprehensive school services, but, in general, they have the caries problem fairly well under control. Their effect on periodontal diseases appears to be minimal and, unless there is widespread fluoridation of water supplies, their preventive effects on either condition leave much to be achieved. A WHO study of delivery of dental care in five such countries shows that two of the prevailing systems have achieved virtually total care in respect to dental caries, but no significant reduction of the disease, while for the remaining three about half of the caries are treated, but one of them has been successful in its preventive program.

In developing countries, the trend to plan a modest national oral health program is emerging, but increases in caries prevalence, if unchecked, are likely to overwhelm such efforts with needs and demands for which there could not be a sufficient timely response in manpower

production and which would represent an unbearable extra economic burden.

I expect that the approach WHO is trying to develop has become very obvious from this description. Paradoxically, combatting dental caries may be a more urgent problem where its prevalence is extremely low than where it is one of the most common diseases. In the latter situation, the large problem is handled moderately to very well, and emphasis is needed on prevention to reduce the prevalence of caries and to at least control the hitherto neglected periodontal diseases.

Where the caries problem is small, but increasing or likely to increase, a comprehensive preventive plan and program is needed to prevent or greatly retard any increase in its prevalence. Again, at least control of periodontal diseases should be included, and manpower production to handle the increasing needs and demands which cannot be prevented should also be a fundamental part of the plan.

Thus, prevention should be the spearhead of our approach at either extreme, the differences being in methods chosen and in selecting priorities. In highly developed communities where all parts of the population have a high prevalence of dental caries and fluoridation of water supplies is accepted, that method is the one of choice, combined with community or school programs of oral hygiene. Where the fluoridation of water supplies is not accepted, a choice must be made from other methods of using fluorides, based on acceptability to the community and the profession and on cost-effectiveness.

In developing countries, fluoridation of water supplies is likely to be unavailable as a choice, with the occasional exception of main cities. The selection of a fluoride method is likely to be critical in these cases and the most cost-effective way must be sought, taking into account the need for the group supervised, self-application approach and the lack of dental manpower. In those situations, supervision by school teachers and by health auxiliaries in health centers is a first consideration and provides a simultaneous opportunity for programs to improve oral hygiene practices. Resources are likely to be so scarce that even these programs may need to be introduced selectively in population groups for which there is evidence of caries increases or in which such increases might be expected earlier than in others.

After prevention as a main thrust, come provision of emergency and demand services, systematic services to target groups, manpower production and evaluation. For the two extremes there are the same principles, but

massive differences in accent. Emergency and demand services are usually well provided for in developed countries, whereas they are a priority issue in developing countries, where use of health (non-dental) auxiliaries is probably the only solution for providing these services in an organized way.

Systematic services for target groups may be comprehensive or minimal in developed countries and operating auxiliaries may or may not be used. Where such services are desired and deficient, firm plans are needed involving the rationing of resources which are available and development of those which are not. However, there is not the sense of urgency in such situations as in the other extreme, where well-planned services, utilizing operating auxiliaries and in general making the most economic use possible of resources, are essential to handling the problem which exists and to preparing for future problems. Again, there is need for integration of manpower production with services to be provided for any population, and that integration should apply as well to the whole dental health team and to all health manpower. However, that need is another example of the greater urgency for careful and rational planning in the developing situation, where less than optimal use of manpower resources is even more tragic than in situations where those resources are more plentiful.

Evaluation of plans, goals and programs provides the same contrast as for manpower production between the two extremes. An integral part of planning in any situation, it is probably more critical in developing situations because the rate of change is usually more rapid. Admittedly, if a total population with high caries prevalence introduces fluoridated water supplies, there will be a dramatic reduction in treatment needs for schoolchildren in a 10-year period, but even with comprehensive services there can be rechanneling of resources for other needs. However, in the developing situation, the change in the other direction, which occurs despite all efforts to prevent it, needs an early warning system so that a different approach can be substituted before the situation gets out of hand.

These contrasts explain the basis for our WHO program to assist member states in the provision of oral health care. To summarize, in terms of WHO efforts, one program area is assistance in planning at the national level with measurable goals, and integrated both with the overall health plan and within all aspects of dental services and manpower production. Whatever the program, be

it prevention of a disease, oral health education to change behavior, provision of services, or production of manpower, measurable goals are suggested and included in calculations of resources needed. Thus, if caries is to be 1 DMF tooth loss in five years time, or demand is to be 20 percent higher, resources are planned accordingly.

Associated and of equal importance is our preventive program, which is based on a resolution passed at the World Health Assembly in Geneva in May of this year. This program consists, first, of assisting a certain number of member states each year to develop national preventive programs in oral health, particularly by use of fluorides, and of generally promoting prevention as the top priority activity in oral health endeavors. In addition, our preventive program will include a research coordination activity aimed at improving our ability to assist, and it will be supported by an information system.

Our global epidemiology is a vital servicing activity which will improve our basic knowledge of oral disease prevalence and will monitor changes to which oral health programs need to react. This activity will include information on oral mucosal diseases, as well as the common conditions, and will be integrated with the preventive information system.

As further support for planning activities, we are involved in curriculum development for auxiliaries and professionals related not only to each other but to other health sectors.

We feel that through these program areas we have developed an approach and methodology which is versatile and targeted towards the promotion or maintenance of oral health for all people.

ROBERTO GEREDA T.

Promotores Rurales En Salud Oral De Guatemala

El crecimiento explosivo de la población guatelmalteca, la elevada proporción de la población que vive en comunidades rurales pequeñas y aisladas (el 64% de la población vive en 3,903 comunidades de menos de 2,000 habitantes), un ingreso per cápita extremadamente bajo, en el área rural (Q80.00 al año) y una educación primaria que cubre únicamente el 50% de las aldeas guatemaltecas - de las 10,000 aldeas que hay en la República, sólo 5,000 tienen escuela y maestro - (10) son factores que influyen directamente sobre los problemas de salud y sobre los servicios de salud en la República de Guatemala.

En lo referente a servicios de salud oral en el interior del país, las cifras actuales, indican que se tiene en el interior del país, un odontólogo por cada 43,114 habitantes, en tanto que en la ciudad capital existe una satisfactoria relación de 1:3559, la cifra anterior contrasta con el hecho de que tan sólo en el Departamento de Totonicapán, hay 168,700 habitantes y ningún odontólogo laborando en forma regular en ese Departamento (2, 3, 7, 12).

En 1971, las estadísticas de América Latina y el área del Caribe señalaban que sólo tres países (Argentina, Chile y Uruguay), tenían más de 3.5 odontólogos por 10,000 habitantes. Más de doce países no alcanzaban un promedio de un odontólogo por 10,000 habitantes. El promedio del área era aproximadamente de 1.9 odontólogos por 10,000 habitantes (11).

Para el año de 1975, en Guatemala tenemos 0.8 odontólogos por 10,000 habitantes. Lo anterior nos indica que estamos entre los doce países de América Latina que no alcanza una relación de 1:10,000 habitantes, y que Guatemala está por debajo del promedio general del área que es de 1.9:10,000 habitantes (12), a estas cifras desconsoladoras hay que agregar el hecho de que la comunidad rural en un alto porcentaje no está motivada para "demander los servicios odontológicos," salvo en casos de emergencia (1).

Se reconoce que la escasez de personal de salud de todas las categorías es uno de los mayores obstáculos para el desarrollo y fortalecimiento de los servicios de Salud en nuestro medio (13), y en muchos países es imprescindible recurrir al empleo de personal adiestrado no profesional, y éste cuando está adecuadamente supervisado, pue de constituir una contribución valiosa a la salud (4, 5).

Los recursos humanos son los más difíciles de manejar. Para producirlos no sólo se necesita dinero y hombres, sino

también tiempo (13). El efecto de cualquier medida correctiva que se adopte al principio de ésta década, no empezará a sentirse hasta 1980. Esto es lo que constituye el fenómeno latente de los recursos humanos.

El problema de la salud oral no es un problema puramente odontológico, también es un problema social (9) y lo que debe buscar la profesión dental en nuestro medio, es-poner al servicio de la población los conocimientos adquiridos más que revisar la parte técnica y artesanal. La noble frase de la Universidad de San Carlos dice: "Id y enseñad a todos."

Se dice que sólo el odontólogo debe intervenir en la cavidad oral, pero de cara a esto, en la actualidad ningún odontólogo graduado está llegando al área rural dispersa guatemalteca, en donde vive el 64% de la gente, entonces, definitivamente debemos pensar en otra alternativa inmediata.

En vista que es competencia de la Facultad de Odontología la preparación de los recursos humanos odontológicos, sean éstos de cualquier nivel, se decidió en el año 1969 iniciar en el Departamento de Huehuetenango, un programa piloto de: "Promotores Rurales en Salud Oral," mediante la selección de 18 líderes indígenas de 10 municipios y 8 aldeas de aquel Departamento de la República de Guatemala. A los candidatos promotores de cada comunidad, se les exigió cierta educación básica (saber leer y escribir), y fueron seleccionados en algún grado por la gente de las comunidades respectivas.

Los objetivos iniciales del programa piloto en el año 1969 fueron los siguientes:

1. Evaluar el adestramiento y la utilización de un nuevo tipo de personal rural en Odontología ("Los Promotores en Salud Oral").

2. Que los promotores sean las personas de enlace entre su comunidad y los centros de salud regionales.

3. Que los promotores trabajen en "Asistencia Primaria," en actividades preventivas y curativas de las enfermedades más comunes de la Cavidad Oral (Caries Dental y Enfermedad Periodontal).

4. Evaluar la utilización de sistemas de "Trabajo en Equipo" de los Promotores.

5. Que los promotores actúen como líderes positivos y agentes de cambio en el proceso de desarrollo de la comunidad (6,8).

Desde un principio los promotores han trabajado en un plano bivalente, es decir en Salud Oral y en Salud General. En el proceso enseñanza-aprendizaje de los promotores, han participado profesores y estudiantes del último año de la Facultad de Odontología de la Universidad de San Carlos de Guatemala.

En 1971, el adiestramiento se extendió al municipio de Barillas, Huehuetenango, con tres promotores más. En 1973, se extendió al municipio de Sayaxché, el Petén, con otros tres promotores. En 1974, se amplió al municipio de Nahualá, Sololá, con cuatro más.

En el presente año el programa se ha llevado al área selvática del Ixcán, El Quiché, con ocho nuevos promotores.

En la actualidad laboran un total de 33 promotores distribuidos en las regiones antes mencionadas.

El entrenamiento de los diferentes grupos de promotores se ha desarrollado en las propias comunidades rurales en que trabajan los mismos, mediante cursillos periódicos de educación continuada, (generalmente tres al año). El proceso de enseñanza-aprendizaje, se ha basado en aspectos preventivos y de recuperación de la Salud Oral.

Debido al desigual comienzo en el programa, de los diferentes grupos de promotores hay grupos avanzados como los de Huehuetenango, que ya efectúan rellenos de amalgama de plata, limpieza de dientes y aplicación de flúor para endurecer el esmalte de los dientes y prevenir la caries dental, además de conocer con solvencia las Técnicas de Anestesia y Exodoncia Dental.

Un aspecto significativo en el proceso de enseñanza-apredizaje de los promotores rurales ha sido "El Trabajo en Equipo," el cual consiste básicamente en unificar esfuerzos de los promotores para lograr mayores coberturas de servicios odontológicos integrales, en un tiempo más corto. Periódicamente se reunen a promotores, estudiantes de último año y profesionales de la Facultad de Odontología en determinada área rural, efectuando a los escolares del lugar, trabajos dentales en las siguientes unidades:

a. Examen, Diagnóstico y Plan de Tratamiento.
b. Profiláxis y Aplicación de Flúor.
c. Preparación de Cavidades.
d. Rellenos con Amalgama de Plata o Materiales Intermedios.
e. Anestesia Dental.
f. Extracción Dental.

De las unidades señaladas anteriormente la única que todavía no realizan los promotores solos es la Preparación de Cavidades, la cual es realizada por profesores ó estudiantes del último año de la Facultad.

Como se ha dicho el trabajo en equipo busca básicamente la producción de servicios odontológicos en serie.

La coordinación actual del programa de promotores rurales en salud oral está a cargo de la Unidad de Nuevos Recursos Humanos y Otorgamiento de Servicios Odontológicos, de la Facultad de Odontología de la Universidad de San Carlos de Guatemala.

Conclusiones

a. El promotor rural en Salud Oral constituye en nuestro medio un nuevo tipo de Personal Odontológico.
b. Ha sido un método de planificación de recursos humanos que toma en cuenta las características guatemaltecas.
c. Este programa de promotores, es un intento de transmitir a la colectividad parte de los conocimientos y de la responsabilidad actualmente considerada como exclusivos del Odontólogo.
d. Se ha organizado en las zonas rurales servicios mínimos de prevención y recuperación de la salud oral, en que las funciones se han delegado a Promotores originarios de esas mismas zonas.
e. En vista de los significativos resultados, este tipo de programa debe extenderse con una visión auto-crítica a otras áreas rurales guatemaltecas.

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HEBERTO JIMÉNEZ

Sistemas de Atención Odontológica

1. Fundamentos Conceptuales

1.1. La década 1.970-1.980 actualiza el concepto del diseño de sistemas integrales de salud incorporados a los planes de desarrollo nacional y regional, con sus correspondientes mecanismos de planeamiento y de administración de las Instituciones de Salud.

1.2. El diseño y operación de estos Sistemas de Salud exige una conceptualización más analítica de salud y encausa el análisis global de las relaciones de salud con las otras variables culturales y políticas que intervienen en el problema sanitario.

1.3. Un Sistema de Salud debe constituirse a partir del sujeto de salud: el individuo y su grupo familiar, en su necesidad específica de atención en salud y en su potencial para participar y promover salud en su misma comunidad.

El primer componente del Sistema es, por consiguiente, la situación de salud de la comunidad: su perfil de morbi-morbilidad, sus expectativas de vida demográfica y de participación, su condición epidemiológica, su situación ecológica y su estructura económica y social.

Este primer componente: SITUACION define la NECESIDAD y LA DEMANDA en Salud.

El segundo componente es el de los servicios de Salud con sus dos áreas principales: el servicio público y el servicio privado.

Este segundo componente - Servicio - expresa la POLITICA y define la OFERTA en Salud.

El tercer componente es el de la educación en Salud con sus dos tareas basicas de investigación y aprendizaje y dos complementarias de documentación y asistencia técnica. Y con sus dos metas educacionales: el agente de salud (Odontólogo, Personal Auxiliar) y el sujeto de salud, la comunidad misma.

El tercer componente es una resultante de las exigencias de las dos anteriores = Demanda y Oferta en Salud, y pauta, con su creación científica y la formación de personal, las condiciones de esa relación.

Este tercer componente - EDUCACION - define la CAPACIDAD Y CALIDAD EN SALUD.

1.4 La Odontología como PROFESION debe ser capaz de reconocer la situación real de salud para producir los "Sistemas de Atención Odontológica" necesarios para darle solución a esas necesidades y demandas.

Es así, como entendemos que en una Facultad de Odontología lo esencial es establecer un "Sistema de Educación" para un "Sistema de Servicio" donde los objetivos, antes que atender otros intereses, debe hacerlo con los del medio social, para lo cual la INVESTIGACION debe estar orientada al diseño de modelos de estructura profesional odontológica, que sean la respuesta adecuada en recursos de salud, a las necesidades sociales, o sea, desarrollar un plan academico, docente-investigativo y de servicio, de acuerdo a las realidades de la Comunidad.

1.5. El Sistema de Educación Odontológica debe poseer, en consecuencia, objetivos muy reales en relación a las necesidades de salud y sabemos que ésta es un factor del Sistema Social, y por tanto, constituye a su vez un Sistema que es una inter-acción de la situación de salud, del servicio de salud y de la Educación en salud (investigación y aprendizaje), que es necesario reconocer, diagnosticar o más propiamente "medir" con método cientifico, para en función de ello procurar con el Sistema Educativo Odontológico, los recursos humanos, los técnicos y los político-administrativos necesarios, para cubrir esas necesidades. En resumen, LA EDUCACION ODONTOLOGICA, así entendida, debe responder a las necesidades y demandas de la comunidad, previamente investigadas con apropiada metodología científica para producir los "Sistemas de Atención."

2. Metodología

2.1. Existen diferentes condiciones de desarrollo en areas de población más atrasadas que otras, lo que establece una escala de diferentes "MOMENTOS" de desarrollo de los "Sistemas de SALUD" en una serie de momentos de desarrollo:

a. Area Metropolitana
b. Area Urbana
c. Area Urbana Marginal
d. Area Rural Concentrada
e. Area Rural Dispersa

La palabra MOMENTO expresa aquí, la condición histórica, científica y tecnológica que vive una comunidad respecto a otra y en relación con el "espacio-tiempo" contemporáneo.

2.2. Para cada una de las comunidades seleccionadas se cumplen las siguientes etapas de programación:

- Estudio socio-económico, epidemiológico y clínico de la comunidad y solución de los problemas de urgencia.

- Equipos de Salud para saneamiento básico y saneamiento integral de la comunidad.
- Nuevos diseños de sistemas y técnicas.
- Aplicación progresiva de lo comprobado en comunidades y servicios odontológicos del país.

2.3. Se aplica una acción integrada de docencia, investigación y extensión aprovechando al máximo los recursos humanos, técnicos y político-administrativos de que se dispongan.

3. Sistemas de Atención Odontológica

3.1. Definición: Son el conjunto de recursos humanos en Odontología (Profesionales y Auxiliares) de recursos técnicos (Equipos, Técnicas, Materiales e Instrumentos), y de recursos político-administrativos (normas y procedimientos), orientados científicamente en forma de planes de tratamientos preventivos y curativos de Odontología Integral, para dar cobertura a las necesidades de salud bucodental de una población c ya comunidad ha sido previamente estudiada y diagnosticada con método científico en su sistema actual de salud.

3.2. El desarrollo de estos Sistemas Odontológicos implica, además de la investigación epidemiológica y sus correlaciones con las variables socio-económicas, la puesta en práctica de técnicas y equipos simplificados a los fines de obtener una tecnología odontológica propia que permita bajar los costos, por una parte, y dar mayor cobertura de salud, por la otra.

4. Presentación de diapositivas y película de los Laboratorios Experimentales de la Comunidad en la Facultad de Odontología de la Universidad del Zulia, Venezuela.

5. Resumen de Experiencias Obtenidas

5.1. Docencia:

5.1.1. Diseño de objetivos docentes en la Enseñanza Odontológica Sistematizada, a nivel de pregrado para Odontólogo y Personal Auxiliar con funciones delegadas.

5.1.2. Diseño de contenidos educativos para el Personal Auxiliar.

5.1.3. Experiencias en la formación de Odontólogos de Post-Grado en Salud Pública Odontológica.

5.1.4. Experiencia en entrenamiento de módulos de recursos humanos en Odontología para Sistemas de Atención Odontológica a nivel rural.

5.2. Investigación:

5.2.1. Diseño, comprobación y aplicación de Equipos, Técnicas e Instrumental Odontológico.

5.2.2. Diseño, comprobación y aplicación de Normas y Procedimientos, metodologías para análisis de costos, productividad, cobertura y concentración de actividades.

5.2.3. Diseño, comprobación y aplicación de Sistemas de Atención Odontológica: metodologías en Programas a nivel de comunidades, escolares y adultos (Preventivos, Curativos y de Rehabilitación).

5.3. Servicios:

5.3.1. Diseño y aplicación Clínicas Corporadas por Sistemas de Atención Odontológica en Areas Rural y Urbanas. (Ejercicio Privado.)

5.3.2. Diseño de Planificación y Programacion de Sistemas de Atención Odontológica a nivel de Ejercicio Público (Programas Integrados Estado-Universidad-Colegios).

6. Conclusiones:

6.1. Existe la metodología científica comprobada, que permite determinar las características de los recursos humanos en Odontología de acuerdo a las condiciones socio-económicas, culturales y epidemiológicas de Venezuela, y consecuencialmente, factible de aplicar a la Región Andina.

6.2. Existe la capacidad técnica y científica para realizar un estudio de recursos humanos en Odontología para la Región Andina, aplicando la metodología de investigación epidemiológica y socio-económica, y los diseños de sistemas de atención odontológica, determinando el recurso humano, los recursos básicos de equipos, instrumental y materiales, los costos y las metas a complir, para la Región Andina.

7. Bibliografía:

7.1. La Enseñanza de la Odontología de acuerdo a nuevos Conceptos de Salud. Heberto Jiménez Navas. Filosofía y Acción en Odontología, Tomo I (Educación). Pág. 122.

7.2. Laboratorios Experimentales de la Comunidad. Facultad de Odontología/LUZ. Maracaibo-Venezuela. Escuela de Odontología/LUZ. Instituto de Investigaciones Odontológicas. Asesoría Oficina Sanitaria Panamericana/OMS.

DAY III

INTERNATIONAL HEALTH POLICY

Panel Review and Recommendations

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PANEL REPORTS

John C. Cutler, Chairman
Dale Gibbs
George A. Silver
Stephen C. Joseph
James P. Hughes
James C. McGilvray
Leon O. Marion
Robert Thomson
George M. Gillespie

JOHN CUTLER: In opening this final session, it is desirable to recall that the theme of the conference was the dynamics of change and the quality of health. We have tried to review various aspects of this, including certain accomplishments and problems, and to take a look ahead.

Out of the discussions, and particularly in looking ahead to the forthcoming meetings and the future of our work, a number of ideas have come forth. Today we will have reports from each of the panels, and we expect certain recommendations, which we, as individuals or institutions or as the organization, may take into account as we proceed.

We shall begin with the report of the two panels on the health programs in developing countries. We had the good fortune to be able to review in some depth what is going on in terms of the programs and deeds carried out through the American Public Health Association and Miss Dale Gibbs will report for the group.

DALE GIBBS

Dr. Hood of APHA opened the panel by saying that the theme of most of our efforts in international health is to make health services more relevant to the people and to improve access to health services.

Dr. Ken Newell of the World Health Organization described WHO policy made in the last year. He noted the urgency of providing primary health services to underserved populations, but cited, however, the WHO-UNICEF board recommendation that assistance had to be selective. He went on to the criteria for selection of countries

that would receive assistance. The criteria include the existence of a national decision to provide primary health care services to underserved populations, countries that have a potential for change, and countries having local health endeavors that could lead at a later stage to national change.

He described principles in the reorientation of development of health services to achieve extensive primary care and urged that these be adapted to local conditions. The theme was that programs had to be unique to the national situation.

Countries are classified by the kinds of assistance that they need. There are four classifications. There are those countries already taking a unique national path likely to give a result compatible with wider objectives. These are the leaders from whom we learn, and whom we can help but only on their terms.

A second classification is those governments where there is a wide understanding of what could be done, and this has led to a conscious choice to proceed. This group requires information on past successes and failures of others, and suggestions and assistance as to how to proceed. Many in this group require outside assistance in processing capital costs of change. He characterized Thailand and Colombia as being countries that perhaps fall in this category.

The next category is those who have not yet faced the realities of the problem before them and require help in the steps needed to result in national awareness. They require exposure to other situations, training and institution building, and support and encouragement to mount some national experiments which may indicate possibilities for the future.

Finally, there are those where steps are being taken for rural and economic development as a priority, but the health component has not yet been understood or fully appreciated. In such countries health is clearly the junior partner and is a helper or supporter, rather than a primary agent of change.

Dr. Newell suggested there was likely to be no overall model in these classifications, but simply a series of unique national solutions. He discussed the problems of the donor agencies in bilateral sources of funds for these countries, and the difficulties these countries have in approaching these agencies. He said that it was unlikely that coordination of these efforts could be effectively carried out at anything other than the country level, indicating that the agencies are going to have

to work within the countries on these problems.

Finally, within the health sector, Dr. Newell indicated that we lacked experience in many of the things we advocate. We have not yet really started experimenting with continuous methods of training and supervision required for new kinds of health workers. We do not know the advantages and disadvantages of the different ways of reaching a village, getting the confidence of the people, and helping them build their own village structures.

Finally, the real question is how we can assign tasks in order that they get done without hurting any of our varied personal, professional or organizational efforts and sensibilities. He said that this seems to be the hardest and most difficult question currently before us. I suggest that it is the pirority question which we should be considering on the program next year.

Following Dr. Newell's talk, Lee Howard of the Agency for International Development spoke on AID policies. He urged that we concentrate our efforts in the next ten years to respond to the leaders, farmers and laborers in the country who face the harsh realities of their physical and social environment, and who are not prepared to wait 20 years for change.

He described the conditions in these countries as having a rather dismal outlook, quoting the World Bank's statement that the unprecedented growth rates of the past decade have not benefited the majority of the poor. Under the best application of current family planning programs, a condition not yet achieved, lower population growth would not be of sufficient magnitude by the end of this decade to permit an increase in jobs, per capita income or food for the majority of people. Advance in these areas cannot be dependent upon population programs or health programs alone. A multi-sectorial approach is necessary.

Dr. Howard described the necessity for a proper fit of all the key technological elements of these programs. He described three misfits that have probably been applied in health programs that have affected our success rate. Misfit one was the unimaginative application of Western curative medicine. We have heard a great deal about this. Second, in nations with a recent colonial history, especially in Africa, expatriate medical health administrators have been required to provide skeletal health coverage in countries where there is often less than one doctor per 100,000 population. These programs have been dependent on public financing completely, and the impossibility of doing this over widespread areas is obvious. He said the

principle of using less costly, middle-level auxiliary personnel was sound, but the system created a heavy drain on limited public budgets.

Misfit three is the proliferation of the vertical approaches to public health practices. Dr. Howard urged an integrated approach. He suggested that, as opposed to capital intensive or labor intensive assistance programs, what we really need are communication intensive or information intensive programs. Communications technology should be fully explored in an approach which may be characterized as information intensive. The value of the formal and non-formal health system linkage still remains to be demonstrated on any large scale in most developing countries.

Dr. Howard ended on an optimistic note. An integrated approach to health services has picked up much in the last five years. In 1973 there were approximately three programs that were receiving some sort of aid assistance in this effort. In 1974, there were eight, and in 1975, there were 16. AID expects 22 in 1976, and 24 in 1977. We should be beginning to get results from these programs. This was the theme of the talks by Dr. Somboon and Dr. Delgado about two programs ongoing, and from which results are beginning to appear.

Dr. Somboon, the Director General of Health in Thailand, is also the Director of the DEIDS (Development and Evaluation of an Integrated Delivery System) program in Lampong Province in northern Thailand. The program, as described by Dr. Somboon, was designed as an integrated approach to rectify the problem of having inadequate numbers of health personnel and, more importantly, the problem of available health services that are not being used. They reach approximately 15 percent of the people in that area. The DEIDS program is designed to make these services available and accessible to the population of that area, based on meeting the felt needs for curative medicine. It is a spearhead for preventive efforts later on, and the integration of private sector efforts, securing the cooperation of the private sector, traditional practitioners as well as the physicians, and the druggists.

The program is based on the use of a "medic," whose training is designed specifically to fit into the Thai context. It is not the straight medic program designed in Hawaii, which is used in other areas.

Dr. Delgado, of Tulane University, described a similar program designed to reach an urban population or a semi-urban population in Latin America. This is the Cali, Colombia program, which has gone through its first

stage and is now being extended to another 100,000 people in the rest of the country. This will happen on the basis of a simplified model that came out from their first program.

Their program has about six main elements. The first one is maintaining contact with households in the community. Each household is visited every three months, and more frequently if there are high risk cases or pregnant women. This gives attention to the felt needs of the community. Also, to the maximum degree possible, community resources are allocated by involving the community in choosing, for example, the services that they want. Professional personnel are used to the maximum degree possible, but with greater delegation of authority.

Both programs of Drs. Somboon and Delgado are emphasizing cost-effectiveness, and use different methods for evaluation. The means of evaluating success are being emphasized by both AID and APHA.

We really did not have an opportunity to discuss the programs. Perhaps next year more of the emphasis could be on the individual programs and their results, and more discussion from the floor.

JOHN CUTLER: Next, Dr. George Silver of Yale University, and the chairman of the afternoon panel, will report on that panel's discussions.

GEORGE SILVER

The afternoon panelists concerned themselves with some of the thorny problems that lie behind the ceremonial screens of program design and the aims that are usually presented. They were viewing efforts that have emphasis on innovative program development, integration of program activities, and coordination of national and agency efforts, including the voluntary sector, for support of health efforts in the developing countries.

In some ways the exposition of health programs in developing countries offered more of a platform for what we might learn than what we might teach. The panel represented a separate but related effort. Dr. Clifford Pease, the Director of the Technical Assistance Division of The Population Council, presented the Council's significant effort in the direction of incorporating family planning projects in maternal and child health activities in the developing countries.

Dr. Joe Davis, the soon-to-be Director of the Division of Health Planning at AID, talked on programs aimed at improving the quality of life through innovation in the health sector. He was assisted by Eileen Crawford, a research associate in the American Public Health Association, on an active development of a system of information exchange. Russ Morgan, a senior health specialist for APHA, talked about programs developing voluntary action in support of the official health services in developing countries. David French, the Director of Community Health Affairs at the Boston University Medical Center, talked about collaboration for health services in the developing central west African countries.

Taken one by one, Dr. Pease described the aims of a program now operating in four countries to bring some minimal professional care to every pregnant woman before, during and after delivery, to see about promoting maternal and child health services and family planning in a combined program. The World Bank and the United Nations Family Planning Activities supported this program in the countries, Indonesia, the Philippines, Turkey and Nigeria. Women are cared for through the last six months of their pregnancies and 24 months of the infants' lives.

The programs are a success by the evaluation standards used. They succeed in integrating maternal, child health, and family planning services in a feasible way compatible with the health services of the country, in replicable mode.

Dr. Davis described AID efforts to encourage innovative health program development and low-cost medical care delivery systems through inexpensive and culturally acceptable means. There is a $16-million budget for 12 countries now, and there will be $28 million by fiscal 1977 for 24 countries. The emphasis is particularly in the manpower area, with alternative financing methods and emphasis on paraprofessionals.

Eileen Crawford described the APHA effort to create an information resource that could be used to help workers in the field. What is being done by whom? Who is in charge? What methods are employed? It is to be more than a directory. A multiple section data collection instrument has been developed, and indicators of innovation will be collected. Those who search this data bank will get more than just directory notices. Data on the possibility of transfer of innovation will be provided, concerning successful or failed schemes, so that failures perhaps will not be repeated, as so often has happened in the past.

Russ Morgan described an effort to overcome difficulties in involving people in official health activities in developing countries, including the private sector, that will parallel and complement official actions in developing countries. He pointed out the possibilities of the use of multinational corporations in their social action in these countries, the kinds of needs that were developed, and the ways that the voluntary agencies might help.

Dr. French described a very complex program of collaborative efforts just getting under way, involving 20 countries in West Africa, with financial support from the United States, France, United Kingdom, the European Economic Community, host countries, AID, and Canadian and Swedish aid agencies. The task of coordination is admittedly enormous, but Boston University, through its Department of Community Affairs and the resources of the institution, is prepared to undertake this.

The first phase will focus on coordinated planning and manpower training, disease and record surveillance. The second phase will attempt to mount a prototype health delivery system based on the first phase. Altogether, questions were directed and particular attention was paid to the value of this down-to-earth approach, its dangers and difficulties. But, great hope was held out for a future based on these new assumptions and the innovations thereby accomplished.

JOHN CUTLER: Dr. Stephen Joseph, substituting for the chairman, Dr. Donald Ferguson, will report on the panel devoted to health programs in the urban setting.

STEPHEN JOSEPH

I didn't know I would have to report and did not take notes in the session. This has a good side and a bad side, for it allows me to say whatever I like. I would like to ask any of the other panelists or observers to add to my remarks.

One of the most interesting things about our panel was our difficulty in defining what we really wanted to focus on. I say that not in a critical sense, but as an interesting problem, because the title of the panel was "Health Programs in the Urban Setting." It became clear that the interest not only of the panelists themselves, but also of the people who attended the session, were well beyond that. In the end, or at the beginning, we settled on looking at the implications of large rural to urban migrations as they affected health services. The panel discussed health services actually delivered within the urban setting itself, and health services in the rural areas that would have some relationship to people moving out of those areas, as well as to those who would stay in these areas.

Michael Fuchs of the Indian Health Service described for us a research study that looked at the implications for the utilization of health care and the financing of health care among a group of American Indians living in the urban area around San Francisco. He described some of the pattern shifts both within the culture of that group and within the health care system for them as they move from rural areas far from San Francisco into the urban area.

Certain aspects of Fuchs' presentation struck me, and I think they are of interest to relate. One is the importance of various kinds of cultural dislocations to individuals, families and groups as they move from a rural base into an urban setting. However, an interesting point in Michael Fuchs' presentation, and one which I had not thought of much before, is that one has to look into the individual circumstances. He brought out very well that in the group under study the economic circumstances in the urban area, in this setting, for this group, were better in the urban rather than rural areas. Usually,

one assumes the opposite situation. Fuchs shows an incongruence between the rural area, where health care provided by the Indian Health Service of the Public Health Service is available and responsive, and the urban area where there is greater economic opportunity. In the urban area, however, health care, available in the rural areas, is lacking. The disenfranchised rural poor who move into an urban setting face a complex array of fragmented health care institutions and financing mechanisms which maintain fragmentation of these systems.

Dr. Cunningham of the Mount Sinai School of Medicine gave a historical paper. In his presentation he compared the development and function of the community health worker in rural and urban areas. He cited his study that compared maternal and child health in rural Nigeria with that in New York City.

What Dr. Cunningham did that I think so valuable was that he developed for us a table of comparative measures on the development and the role of the community health worker. Most of such issues as selection, training, motivation, support, continuing education, and role in the community and others. What are the parameters of these issues in the rural area for the community health worker? What are the parameters of these issues in the urban area for the community health worker? Some interesting contrasts as well as similarities emerged.

We had a concern about this one specific point of identification, in general, of the most appropriate people to work in rural areas. Vivian Clark brought up the point that we have to look for appropriate selection beyond the obvious interest in comprehensive considerations for success. So to try to put that in a more specific sense, for example, in the setting of a black urban community, often it is said that the relevant criterion for selection of community health workers is that they come from the black community. Vivian made the point, which she might want to amplify later if I do not interpret it correctly, that there may be very many other factors, both in terms of the individuals and their skills and roles, that are more important in defining individuals for a particular job than merely race and membership in the community.

Finally, Dr. Gertrude Isaacs talked about the development of the Frontier Nursing Service program in rural Kentucky, and its application to projects either in the urban or the rural area. She had data relating to the effects upon morbidity and mortality in the maternal and child population of a program that has placed its reliance on the use of nonprofessionals as primary

curative, as well as preventive, health workers.

I have three summarizing comments in conclusion. First is the obvious importance of health programs being "of the community" and "by the community," to paraphrase the book edited by Ken Newell, rather than "on the community." I will not go into that further. It is discussed again and again at this conference.

The second point, however, has not come up, I think, this year, but came up last year. The point is well illustrated by the three papers that we heard in our group, because all of them tried to present, in this very difficult area, analytic rather than descriptive data. It seems to me that much of the time we end up describing ways which we would like the world to be, or which we think the world may be. I think it is terribly important that we try to analyze the way the world is, and the way the world becomes. All three of the presenters in our panel attempted to present specific data related to a specific situation that can be used analytically as well as descriptively.

Finally, we discussed toward the end of our session the difficulties and the growing dissatisfaction of continuing to look at model or pilot projects developed on a relatively small community scale. There is a growing dissatisfaction and discomfort at the inability of larger population units, such as governments, to either learn enough or have enough courage and conviction out of what is learned to replicate these on a national pattern. The final question that I leave with the group is this: how does one get from looking at model and pilot situations to larger kinds of activities that can have some effect on a national or large regional population?

JOHN CUTLER: Dr. James Hughes of the Kaiser Aluminum and Chemical Corporation will report on the panel devoted to the multinational corporations. I might comment that the program committee felt it was very important to pay some attention to the activities of large multinational corporations in respect to their contribution toward health services. We are very pleased to have this opportunity to hear from this sector.

JAMES HUGHES

The panel on the role of multinational corporations in the development of country health programs consisted of four individuals, including the medical directors of three multinational companies, Exxon International Telephone and Telegraph and the Caterpillar Tractor, plus a practitioner of occupational medicine, who speaks predominantly from the vantage point of academic and consulting experience.

The panelists outlined a spectrum of public health and medical care services that are sometimes provided by the corporation, especially on new projects in underdeveloped areas. Emphasis was placed on the ability and the willingness of at least some companies to assess expertly the health needs of an area where an industrial project is contemplated, and to respond to that need as a part of the project planning.

This is usually done in consultation with local health authorities and in keeping with the aims of a national health plan, where one has been defined. In a few situations, health services may be provided by the company to some neighbors as well as to employees and their dependents, although this type of outreach is not usually sought by the employer.

At some sites, the company-provided health measures are virtually the only services available in the area. There are instances of broad scale vector control, for example, achieved by a company to the benefit of an indigenous population spread over a considerable area.

It is clear, though, that virtually every company is most eager to stay well within the sanitary regulations and the health care legislation of the host country, while employing country nationals as health professionals wherever possible. There is a growing tendency now for companies to seek feasible methods to turn over the operation of health services, especially the delivery of

medical care, to the local institutions as soon as these institutions have been developed to accept the responsibility. This does not mean that the company then loses interest or withdraws its financial support. It encourages and buttresses local capabilities to provide health services and to utilize, again, its own country nationals.

There was then a lively exchange on a number of these points, as you might expect. In response to a challenge that companies might do more by offering financial and material assistance to establish medical care entities in the areas, such as missionary institutions, it was pointed out that many project managers develop community interests of this type, but there are definite constraints on the managers, even where the corporate philosophy of aid may be quite generous.

A major constraint is, of course, the limited funds that may be available to the local manager for discretionary use. One discussant, who by the way was not a company representative, commented on the point that the company's basic objective is to provide goods or services at a profit, and that health benefits, while perhaps supportive of labor efficiency and harmonious community relations, are still an adjunct of the company's main mission. This concept might, in fact, be reminiscent of the labor union adage that the enemy of the worker is the employer who fails to make a profit, for then very little is possible.

Another important constraint, and also an economic one, pointed out by a discussant, concerns the basic nature of the financing agreement under which an industrial plant, or a dam or a new mine is established. The capital requirement for one of these projects is often enormous, usually involving complex loan arrangements with the assistance of the World Bank, the Export-Import Bank, or one of the other major international lending agencies.

Funding ordinarily covers the cost of construction and of production equipment, and if the project is situated in an underdeveloped area, as is so often the case, it must cover the cost of establishing community infrastructures as well: roads, housing, schools and fire houses. All too often in the past, funding for health services either has been left out of the planning altogether, or has been inadequately provided for. Usually, this is on the assumption that the host country will be committed and come forward to meet the increased need for medical care in the project area. Of course, that often is not possible for an already overburdened Ministry of Health, as we all have seen in a number of areas.

It has been seen that if funding for health services is not provided for in the initial loan agreements, in the early planning stages, it just will not happen. Now, happily, as I see it, and others on the panel have commented, just within the past few years, the World Bank has taken some leadership in this neglected area. The Bank is now insisting that loan applicants for industrial and development projects do indeed provide for and forecast capital needs for health services, as well as other infrastructure measures.

If you have not seen the publication of the World Bank with the rather complicated title, "Environmental Health in Human Ecologic Considerations in Economic Development Projects," published by the Bank in May 1974, I would recommend it to you. This publication was contemplated as a manual for the loan applicant, the developing country or the organization that is considering the project. In this manual is an outline of how to assess health care needs, and how to plan to provide them so that the funds are requested in the loan arrangement. Hopefully, others of the major international lending agencies will take a look at that book.

Another discussant, who recently visited a company-operated health facility in a developing country, appealed to us that companies not establish health services that are far in excess of what is available or likely to become available within the decade elsewhere in the country, since the contrast may be so unsettling.

A panelist responded that the expectations of local employees of a multinational company may be quite high on many issues, including medical care. Further, other aspects of the project, the plant and equipment, is so often of the latest technology that medical services are expected to be of a high caliber as well. It was pointed out that a good medical facility often attracts a national physician and other health professionals who have trained abroad to return to their country and practice where they otherwise might not be willing to do so. This helps to reverse the brain drain in a small way and adds to the professional resources of the host country.

Finally, a question was raised as to experience with cost-benefit analysis of health services provided on industrial development projects, and I am sorry to say that no one seemed to have any hard data, or any very good answers on this subject any more than we have on many other aspects in health care. That concludes my report.

CARL TAYLOR: My question is an organizational question that came to mind in connection with two of the reports that have been made.

In connection with David French's project, my question really is, how did Boston University get itself into the posture that it is trusted by so many different donor agencies, and so many different country situations? I think that is a phenomenal achievement, and I would just like to hear how it was done.

Let me ask my double-barreled question before the response. How we establish trust in relationships is at the core of a lot of what we are talking about in very general terms. This is particularly acute, I think, with the multinational corporations. There is an increasing climate of distrust, because of all sorts of complicated factors, including the disparities between what is done within the company grounds and what is done outside. How does Dr. Hughes see this very complicated and difficult period that we are in, in terms of the industrial relationships with the local authorities emerging in the development of mutual trust?

STEPHEN JOSEPH: Since Dr. French is not here, maybe Dr. Cross from AID would like to respond to that personally and directly.

ED CROSS: One has to take into perspective that Boston University did not go out and contact 20 countries. This program arose as a result of approximately three years of effort with the African Regional Committee of WHO which consisted of the Ministers of Health of each country, working with AID and also other donors, and regional organizations, to try to come up with a plan to follow on the measle control and smallpox eradication project that was so successful. This was a collaborative effort to see whether or not such a model could be used for the same countries to strengthen health delivery systems. So, this was a collaborative operation and effort on the part of the representatives from the 20 African countries, plus the donors involved and the regional organizations such as OCEAC and OCCGE in the West African region.

After the coordinating committee was set up, and the project was developed, AID agreed that they would supply, as a part of their assistance in this project,

the project staff. The project staff does not work for AID. We, working on behalf of the project, tried to identify a contractor who would be able to provide this service, not only in the U.S., but field a project team that would work for the project. So, the contact and selection of Boston University was made by AID.

One thing that we have not been aware of in the past is the fact that the African Regional Committee of the World Health Organization is a built-in coordinating mechanism. All of the Ministers of Health are members of this regional committee, and even the African Regional Office of WHO works for these countries. It serves as a Secretariat for these countries, and does not itself have any power other than that given it by the Regional Committee.

JOHN CUTLER: Thank you, Dr. Cross. Now, may we call on Dr. Hughes?

JAMES HUGHES: Well, in endeavoring to establish some trust in company-provided medical services, I think it would be obvious to all of us that it goes back to the very beginning of planning. We try to involve the host country official agencies and key health professionals in the country in the planning and get them in early enough so that they can have a significant input.

I think a number of other points bear mentioning. Some of them are so obvious that I almost hesitate to state them. A very touchy point so often is any suggestion of discrimination in the provision of services for expatriates in contrast to the local employees. That is to be avoided.

On the positive side, it is helpful to emphasize the training potential that a well-established medical service may have for the host country nationals in upgrading their skills and the utilization of equipment and supplies. The replacement of any expatriate staff by locals should be done as soon as possible. To do that in a really aggressive way, I think it is often the experience that sometimes it is the headquarters that has to push the field managers to do that. It is more comfortable for the manager out there to use his own country nationals for some of these highly technical tasks, including medical service.

Also, where possible, if there is a medical school within reach in the country, it often works out well to involve the school and its faculty in consultative

roles and accept their students in clerkships.

Now, any of these measures isolated to just the health services alone would not, I think, succeed. It obviously has to be a part of the whole general philosophy of community relations and respect for the opinions and sensitivities of the local people.

JOHN CUTLER: I think that the two answers we have had open up avenues for much more discussion, but it also leads into the report of the next group, which certainly will touch upon this in philosophy. So, I would like to call upon Dr. James McGilvray of the Christian Medical Commission to report on the panel devoted to international assistance.

JAMES McGILVRAY

In our panel, which dealt with the difficult question of how you apply assistance in the form of resources or advice, and the promotion of primary health care, we had four brief presentations. First, Mary Dewar of Adelphi University talked about the dilemmas that we face from the point of view of the voluntary agencies and the private sector. She stressed the first dilemma, regarding whether multilateral aid was better than bilateral aid. She seemed to favor the multilateral over the bilateral, and I will come back to that in a moment.

Then, Howard Rome, from the Mayo Clinic, but in this case wearing the hat of the World Psychiatric Association, focused on the specialty of mental health, and looked at changing perspectives regarding mental health in some of the recipient countries.

William Oldham, from AID, spoke as a field director implementing AID supported programs, drawing upon his experience first of all in Saigon, and then in Nepal.

I then tried to look at the dilemmas posed by international assistance from a multinational point of view.

We had a very lively discussion. I think it was good that the participants in this group were not inhibited by the members of the panel. It was quite obvious that the participants felt that there were a lot of gaps in what the panel had described from their own limited experience, and they were very anxious to fill in those gaps.

Henry Kaiser started off by questioning some of the bureaucratic procedures of AID. He wanted to know what was in that "little black box" that gets changed every six months for contractors, who are anxious, with AID support, to be involved in projects in international health. That was not resolved.

Ken Newell, somewhat to my surprise, favored bilateral aid over multilateral aid. He does not think that multilateral aid works. He felt that there were chances of

manipulation and failure to satisfy the need of the recipient, while satisfying the requirements of the donors.

In talking about the dilemmas, we dove into the question of whether aid in any form really contributes to development, when to a large degree it is dependent upon social change. We did not pursue that one. I think we decided that if there is money available, let's use it, but let's make sure that it is used in the right way.

One of the most serious dilemmas posed to us was how do we make sure that there is community and recipient input in the design of projects funded by international assistance? How do you get beyond or around the bureaucratic structures of a Ministry of Health, for instance? An example was given of the World Bank's $45-million loan to Bangladesh. I do not see what else the World Bank could have done but to deal with the Ministry of Health. I do not see how any organization like the World Bank, or AID, or any group can really get down to these communities that we are told now must participate in the design and implementations of projects in primary health care.

Now, in the case of the World Bank, much of the money will go into buildings. Much will go into the training of doctors and graduate nurses, who, under the present curriculum of the schools in Dakkar and Chittagong, are taught how to deal with the health care needs of developed countries. The curriculum is used and is modeled on the British patterns of the 1940's. And the training programs in Bangladesh turn out doctors who know more about thrombosis and cardiac monitors than they know about the treatment of scabies or all the parasitic infections that are usually waterborne in Bangladesh.

How do you get around this dilemma? How do you resolve it? How do you get to the people who really want the help? How can you breach the bureaucratic barriers that are there to maintain the status quo, entrenched by a group of professional elites who prefer the rewards of the present system, and do not want anybody to come in and interrupt that system? This was a dilemma which we talked about considerably, but unfortunately, we did not find the answer.

We had the same dilemma that was posed a moment ago by Stephen Joseph about models. How many models do you have to build which demonstrate quite clearly the answers to the problems, but apparently do not disturb the present hospital-based system which absorbs all the current and recurrent capital costs?

We talked about the whole question of how you change or how you create a national will to change in the

direction of primary health care. Dr. Feffer addressed the question to me, which reflected on my old age, I think, because he wanted to know, in my historical perspective, whether I had ever seen a change in national will. Of course, apart from Mao Tse Tung, I have not.

But, this raised a very interesting debate about the whole question of communication. How do we reach the people we most wish to serve? How do we help to create a climate for change in priorities? Because we noticed that today we were supposed to come up with some recommendations, we obliged and we want to offer them to you.

Recognizing that health care is like a consumer product, in that it is as dependent on the acceptance of the consumer as on the services of the providers, and recognizing that acceptance is a function of the consumer's culture, value system and felt needs, health care delivery systems should include a major instructional communication system attuned to the culture of the consumer, and designed to encourage acceptance of recommended services and behaviors. There you have it. Thank you.

JOHN CUTLER: Mr. Leon Marion, of the American Council for Voluntary Organizations for Foreign Service, will report for Frank Goffio on the panel devoted to family planning and nutrition.

LEON MARION

We had a good panel. Frank Goffio, the Executive Director of Care, chaired it, with Dr. Joseph, the Director of the Office of International Health Programs at Harvard, Willard Boynton, the Deputy Director of the Office of Population, AID, and myself, as panelists.

When I indicated that I might be willing to take the rapporteur's job, I said this was the time for me to, again, give my presentation to make sure the message got across.

I cannot say that we came up with any unique characteristics of the whole integration pattern. However, comments came out that integration, again, is only a word. We have heard other words in the past about how the development process takes place. The use of the term integration is not going to produce, by some miracle, the kind of changes that we want to take place. There are other words that are now entering our vernacular, that are pointed to what needs to take place in the developing countries. One of them is change agents. These two words are being bandied around in those circles that discuss the dilemmas of development assistance.

It would seem that, in the traditional patterns of delivering services, we become very protective of that kind of service that we are able to deliver. We find that those who are on a population kick go in that direction with their tunnel vision without looking aside at the family planners. This is a real problem, because it means that here again there must be the kind of communication that has been talked about. How do you look at the total field?

As I indicated, there has been a traditional antipathy between family planning and the health services. Their sensitivity to food and population issues is fairly recent, and has been dramatized by such disasters as the one in the Sahil, the Sudan, and others, across the face of the earth.

Now, we do receive some encouragement at times when we can gather enough statistics and hard facts about what is taking place. Yesterday, during our luncheon program,

we heard some of these statistics, which indicate that, perhaps, at least we are at a turning point in these events. Nobody says that we are around that bend yet.

We find that there is a decreased growth rate in 72 countries over the last decade. Ninety percent of the countries in Asia have instigated a national family plan. This, in itself, is quite an undertaking.

The predictions that were facing us ten years ago about what this planet would be like included massive starvation in India. That has not quite taken place yet; we have gone through the ten-year period. Yes, there is malnutrition, and there is starvation; nobody denies that. But, the massive disaster that some were predicting has not taken place.

Our ability to gather statistics is becoming more and more refined, and this begins to sharpen our sensitivities as to the directions we ought to take in order to be the change agents that we should be for integrated planning. We now get statistics about the doubling time of populations, as brought out by the panel, the developing countries will double their populations in 32 years, whereas in the developed countries that statistic is 81 years.

There was an expression within the panel that there is concern about the impact that we are having on growth. But, apparently no substantive discussions developed on the impact of population migrations.

In the last 15 years, we have been able to reevaluate our methods and philosophy of family planning against the background of the availability of the earth's resources. We detailed the kinds of multilateral conferences that have taken place, beginning with the UN Environmental Conference in Stockholm, and how this has begun to sensitize those in the whole development assistance field to what lies ahead.

But, all agree that we are now at a step in history where a quantum jump must be taken, and we are still listening to how that quantum jump is going to take place. Perhaps this was the most important item brought our group. Unless we find a way to redesign, to retool, to rethink on these types of programs, we are headed for disastrous times in the future.

There is a whole gaggle of individuals who call themselves futurists. They are having some rather interesting discussions, because they are taking various components for survival of our planet earth, and are beginning to project what is going to happen in the year 2000. All of them agree that a quantum jump has to be in the works in the

next 25 years for us to be able to deal with the problems that will be upon this earth in the year 2000.

One panelist stated that contraceptives, now reaching 15 to 20 percent of our target populations, need to reach 60 to 70 percent. There was quite a discussion on dispensing of devices, and whether this really was getting at the problem that needs to be addressed in order to solve it, and also the way by which the dispensing took place.

We have already heard that it is almost impossible on a bilateral government assistance program for one government to send its workers as government employees into the field of the host country to do the job. You must lean upon other entities to do this, or ask the host government to set in motion a plan to do the job.

This brought us into the private sector again. Who is in the field? Who are the entities who are out there in contact with the villagers? This lies within the private sector, whether it be indigenous people or whether it be expatriates that take their expertise overseas.

That led us to some thinking upon the role of voluntary agencies and mission groups. Two of our panelists decided they would give a brief history, one of them the brief history of aid in this whole business, and the other one a brief history of voluntary agencies and missions in this work.

In terms of voluntary agencies and missions, the question was asked, what do voluntary agency programs have to offer that is different, and what do missions have to offer that is different? One of the points was that these entities have flexibility. They have the ability to negotiate with host governments, other voluntary agencies and missions and other international organizations. They have the ability also to be innovative.

Why? Mainly because their programs are not large enough to wreak havoc with any particular country. They make small mistakes. But, they have the ability to test, to innovate, to use examples and models in order to solve the particular problem. Third, they have the ability to act fast.

There was a comment in the meeting on going the multilateral route. If you want to go to the UN, you had better be prepared to have lots of patience, because by the time it gets through the United Nation's bureaucracy, the reason for your instigating the program might have disappeared. I think it is not quite that bad. But, in any event, private agencies have the ability to move fast.

Then, there is another aspect. That is that the private entity has to be sensitive to its constituency. In a

bilateral program, who cares? We get the money from the public. We legislate. We get the Act. We discover what is in the black box, and off we go running.

For the private entity, usually somebody is asking the question, how are you spending my money? Now, supposedly, Congress is to do that with public funds. Sometimes they ask the right questions; sometimes not. Sometimes we are wondering whether they are asking any questions.

But, the private entity is very sensitive to what its constituency wants, and you can be sure that if a Board of Director member of a private entity does not agree with a policy decision, he is going to make his voice heard.

So, there is a built-in evaluation system. There is a built-in checkpoint on private entities through their own constituency. In most cases, private entities, voluntary agencies, and mission groups institute programs for humanitarian reasons. I said in most instances. So, do not get me hung up on the fact that there are other reasons for the entities going around the world.

Through these many years of involvement overseas, they have been able to enhance the practitioners. They have been able to enhance their expertise. If you take a large, multifaceted voluntary agency, you will find that at various times they have aircraft mechanics, family planning experts, nutrition experts, agricultural engineers, ground water experts -- they have all of these things that are involved in their program, to a limited degree. And, in some cases they have already moved toward an integrated plan because there is just so much money that one particular private entity can use in a particular area.

We went on to discuss various other aspects, again with the quantum jump that needs to be taken. Already raised during this session was how one moves from a model into a continuing program. I can assure you, in most instances, once you get a voluntary agency or a missionary group out into the field, you are not dealing with models in most cases. You are dealing with an actual situation in which the personnel, the resources, the financial resources, the commodities, whatever it is, are already on the line. You cannot afford to be bouncing back and forth from various programs, because that is costly.

Now, in most instances, as was indicated by one panel member, health workers have not been particularly interested in the larger development assistance issues, and here again we need to have some retraining. This also has to be a quantum jump, but how do you train these new kinds of people, the new kind of doctor, the new family health

worker? We were not able to solve that problem, but there was an indication that if we were going to make the quantum jump, this becomes a very important question. It has to do with training the trainer.

We had a rather lively group. We raised many issues. Unfortunately, we did not come out with too many answers. As I recall, no real recommendations were made.

JOHN CUTLER: I would next like to call upon Robert Thomson. As you remember, there was the feeling that we had not paid sufficient attention to, shall we say, works in progress. We were very fortunate to be able to create a panel to examine the experience of the groups working in the field, the young and innovative. Robert Thomson will report for this panel.

ROBERT THOMSON

I think I had a particularly difficult task in reporting on this, in that ours was an open panel rather than presentations by panel members. I apologize to my colleagues in the session if my comments seem somewhat editorial, but I think it was impossible to report completely.

The main objective of the forum was an exchange of experiences on community participation in health programming, the interface between traditional healers and the modern Western medical system, and the sociocultural constraints that are involved in implementing these types of health programs.

The consensus in the Monday sessions of this conference seemed to be that community-oriented, multidisciplinary health programs that stressed local participation and self-reliance are the most successful experiences in primary health care delivery.

We had brought home to us, by Kathleen Toomey in her experiences as an apprentice to a Peruvian traditional healer, the positive aspects of traditional medical systems, in the area of psychotherapy, and the really quite phenomenal complexity of the sociocultural factors in the Third World's perceived health needs.

Given community level involvement in external resource delivery, we have to look at what our panel saw as an ethical dilemma. That is, do we intervene or don't we intervene? Interventions inevitably cause cultural changes which can cause dislocations and create more problems than benefits. We must learn how to carry out these interventions with a minimum of damage to the culture and value systems of the community that we are working in.

If we came to any major conclusion, it was that there are no quick answers. There are no models. There are no easily transferable experiences. An open inquiring mind is the most important prerequisite to learn from other group's experiences.

There was a comment that a successful delivery of health resources requires an existing economic base in the community. Where the community does not have a sufficient economic base, other types of intervention will have to be met before health needs are met.

We discussed at great length and shared a large number of experiences on how to work in that community. Given the large number of experiences reported in our panel, I would like to mention several of them as examples of the successes and failures that might be of help to others.

I found particularly interesting the description of an Indonesian program. A village health team, after working a number of years in the village, discovered that while they had local acceptance and had a fairly effective out-reach program to surrounding areas, they were still only reaching 15 percent of the population. Following this discovery, they asked for village participation in, as opposed to just acceptance of, the program. They discovered that the village thought their first felt need was an irrigation system.

The health team got involved in this, and the irrigation system was provided. Another felt need on the part of the villagers was for the training of primary health care workers or cadres. A village program was developed, therefore, for the training of health personnel. A year after this experience had been undertaken, another village decided that they would like to copy this program of training primary health care staff.

When the health team attempted to move into the other village to try to train local people, the original cadres suggested to the health team that perhaps the original trainees should not be doing the training now. The health team fortunately accepted this and became the resource to local programs. I cite this as a model in which external resources support local programs.

Another program described to us was a community hospital, based in the Philippines. As an out-reach program, it involved the training of body health assistants and provision of a broadly based preventive and curative health system.

We had described to us a Putti system in one area of India, that is a hierarchical or structured village organization little known to outsiders. Villagers are divided into areas and will literally stop at the dividing line between Puttis. The system is so well developed that even the dogs in the village respect this boundary.

This system has strong implications for the work of health promoters, trained by external agencies, if they are not aware of this social organization or cultural hierarchy. We might take the village health workers and train them and discover that they can only be effective within their own Putti, and perhaps not even there because of other cultural factors of which we are not aware.

We briefly touched on how to interface with traditional healers. The general opinion was that we should not try to threaten or undermine their power. We should try to develop mutual respect and consensus as to the areas of relative specialization of both the modern and the traditional systems. We should try to improve upon their use of drugs and other aspects of modern Western medicine, yet not destroy their effective use of psychotherapy and spiritual healing.

I think, in conclusion, that the consensus seemed to be that there are no models for duplication. The main prerequisite in trying to deliver external health resources at the community level is an open and inquiring mind, patience, and the study of the types of constraints that other people have experienced. Perhaps with an open mind we can analyze the reality of the situation that we find ourselves in at the village level, and build our own model that will have to be unique.

JOHN CUTLER: We will now have the report for the panel on dental health. The planning committee felt that inadequate attention had been given to the various questions of dental health and public health. I am really delighted to have the report of that panel.

GEORGE M. GILLESPIE

This session considered the existing situation in the area of dental disease and provision of dental service being developed in two countries in Latin America.

David Barmes, Chief of the Dental Unit, WHO, presented the basic problems as viewed on a global scale relative to dental caries in certain specified age groups. He illustrated the predominance of dental caries in developed countries and the relative absence of this disease in areas of Africa and Asia.

He pointed out, nevertheless, that in all populations, dental caries appeared to be on the increase. A review of the data becoming available through the WHO studies in conjunction with the United States Public Health Service has indicated that in certain countries, such as New Zealand, where almost total coverage for provision of services to school children has been achieved, dental caries appear to be increasing. In one country, study site of the International Collaborative Study, however, it was noted that an intensive preventive and curative approach had indicated success of the system over dental caries increase.

He also pointed out the need for the development of an integrated program planning, taking into consideration the need for extensive programs of prevention, and for planning to include the increasing dental demand occasioned by effects of programs of health education. It was pointed out that WHO was currently preparing similar epidemiological data on a global basis relative to periodontal disease, which is undoubtedly the cause of the most extensive loss of teeth in the world.

John Green, Chief Dental Officer, USPHS, reviewed current aspects of legislation as it related to the dental profession and to the particular problems associated with provision of dental services in rural areas of the United States. He indicated approaches that are being taken to encourage recent graduates to practice in areas where there is a shortage of dental professionals and a system established on a state-wide basis to provide information

on sites that might be of interest to graduating students, as in the case of the program in Minnesota.

Green also reviewed the possible programs and the implications for the demand for dental services that would be caused by the inclusion of dentistry within the national health insurance package in the USA and considered that, with a gradual phasing-in of such a program and the development of established auxiliary personnel with expanded duties, adequate manpower could be made available in time to meet the anticipated demand. He identified that $160 million had been spent on dental care under Medicaid in 1974 and that the trend was for an improved dentist/population ratio, with an estimated ratio in 10 years of one dentist per 1,700 population.

The second half of the program related to programs currently being implemented in the countries of Guatemala and Venezuela, in utilizing new approaches for provision of services, particularly to the rural population.

Roberto Gereda, Chief of the Unit of New Human Resources, Faculty of Dentistry, University of San Carlos, Guatemala, presented a program which trains rural leaders to provide basic prevention, relief of pain, and extraction services to child and adult populations in rural villages in Guatemala. Such persons have the basic requirement to enter the program of being able to read and write in Spanish, and be natives of the community in which they are living. They are trained in a series of sequential one-week courses (approximately four per year) to perform the required functions.

This program, which was initiated in 1969 with 18 rural health promoters, now involves some 35 persons and, in 1974, provided dental services to 42,000 people in areas where dental services and preventive programs were previously nonexistent. The promoters also are trained in simple medical functions and provide some first aid and relief services, although major emphasis is on provision of dental preventive programs. This program is integrated with the extramural programs which the faculties of Dentistry and Medicine in the University operate in rural areas with larger concentrations of population.

Heberto Jimenez, Dean, Faculty of Dentistry, University of Zulia, Maracaibo, Venezuela, illustrated the approach being taken by the Faculty of Dentistry in developing systems of dental care for distinct types of communities in the northwestern region of Venezuela. The need for an interrelationship between the development of human resources, the delivery of services, and the political and administrative system were stressed.

Four models for the delivery of comprehensive dental services were illustrated, including one for a comprehensive preventive program for school children which, involves application of fluoride and sealant materials at an estimated cost of US$3.50 per child per year. The role and functions of dental auxiliary personnel in relation to dental professionals was illustrated in each case. Examples were shown of equipment developed in Venezuela by the Faculty to support such programs, and work patterns of professional and auxiliaries performing clinical procedures.

JOHN CUTLER

This leads to the last panel. I will report for Dr. Effie Ellis on the panel on women. There was a good deal of attention paid to the woman as the one who not only carries on the tradition, but the one who can be the innovator and change agent. Here in this conference, we have had this shown to us, actually, by the report of Kathleen Toomey, who awakened great interest in the subject. A change was made in the program so that we could add an ad hoc panel for the discussion of certain other areas.

Two reports were given. One by Rosemary Wood, speaking in particular about the American Indian, whose problems, as I believe has been demonstrated, are similar to the problems of the developing world. There is much to be learned from the experience to date with the Indian population.

The other paper, by Elizabeth Sharp, dealt with the role of the woman as the nurse-midwife. As you can imagine, there was quite a bit of discussion about the fact that in this country, as in other parts of the world, increasingly, the male is serving in nursing roles. By the same token, the distribution of women, and the percentage of women in the other health professions is widely variable for cultural and other reasons.

There are two further points to be made. One is the importance of the woman as mother, in setting the environment for the birth of a healthy child with potential for development. Thus, the woman has a unique role to assure that the child is born healthy for subsequent education and development.

Second, the particular role was discussed of the woman in the mothering of the infant, to provide developmental stimulus and care. One member spoke about day care centers, as to whether or not they might be as effective for child raising. There was a good deal of discussion about this. But I think nothing was said, if you will, that indicated any substitute for this particular role of the woman.

I think the conclusion of the panel was that the woman has a unique and exceedingly important role in partnership with the male, and that certain roles are hers. Finally, one of the important elements in the dynamics and improvement of the quality of health is the greater involvement of the woman at every step. What was brought out very clearly was the fact that the woman must be involved from the beginning in planning for programs for change.

We have a few minutes, and I would like to open the floor for questions of the panel and further discussions.

INQUIRY AND COMMENTARY

WESLEY METZNER: I am a doctor from San Antonio, Texas. I want to address this to Dr. Joseph. In our group we discussed going into the rural areas and seeking out personnel to do the primary health care. We said that it was important to try to bypass the persons who obviously are in a bureaucratic hierarchy there and who would give all the positions to their friends and cousins who might not conduct it well. Instead, we should try to reach the people and ask them who they would go to for help with their health problems.

Second, we said that it would be very important to get the existing hierarchy involved in the planning. But Dr. Joseph spoke of the difference between seeking out people in rural areas and urban areas. That is a very different situation. There are younger people moving from job to job in the urban areas. I think it is important in these final minutes for Dr. Joseph to talk about the selection of the urban type of personnel to carry out primary care.

STEPHEN JOSEPH: I think I understand the question. I think the importance of what Nick Cunningham did in his paper is that he presented us with, in effect, a chart or a road map. On that road map, he put across the top "rural area" and "urban area," as related to the community health worker. On the side of the road map, he noted selection and training, motivation, rewards, administrative mechanisms, and personal characteristics. Now, many might disagree with one or more of the cells in the road map. But the importance of the work that Nick does is that it gives us something around which we can disagree or agree. It gave us a basis for a dialogue.

That is the statement. Now, to answer your question. I think I can say a couple of things. I do not know if Vivian Clark is still here, but she may be able to articulate better than I the answer to your question. For example, in talking about the difference in selection of community health workers in rural and urban

areas, Dr. Cunningham mentioned the different characteristics of those rural and urban communities. For example, the rural community is more homogeneous, with many traditional cultural modes that have not fragmented. The urban communities that he described were more fragmented and full of people who stay for short periods of time. These two situations are so different that one has to think whether different sorts of persons are required to work in each area. Dr. Cunningham noted that it is more likely in the rural community to seek out an older person with tighter cultural ties to that community. While in the urban setting that he described, it might be possible or preferable to look more for the substantive technologic qualities, if you will, that one wanted in the particular person. Because of the great mobility in the urban area, the other characteristics might not be so important.

JOHN BRYANT: I was not on the panel, but I am interested in the subject and would like to call your attention to what I consider to be an important reference. There is a book that has just been published by Charles Elliot, called Patterns of Poverty in the Third World. It is not focused on health, but it has some health-related issues in it.

In connection with the comments that Steve Joseph just made, let me call your attention to a concept with which Charles Elliot deals. He is very interested in these questions of patterns whereby poor people are excluded from welfare and economic systems. In dealing with the urban setting, he points out what Steve indicated, namely, that it is a very nonhomogeneous population. This population can be divided perhaps into two general categories. There are those who are a part of the formal economic system, by which we might mean those who have jobs and have an employer. This group comprises a fairly stable size of the population. The growth of that sector of the urban population is very slow. It depends upon the economic development of the country.

The other sector of the urban population are those within the informal economic system. This sector of the urban population makes a living on a marginal basis through street hawking, car washing, prostitution, and the like. These tend to be excluded from and are sometimes exploited by those that are in the formal system.

It would seem to me that, if one is hunting for health workers who would be intimately related to the urban population, one would want to take into account that kind of a dichotomy. It is probably not a dichotomy but a trichotomy! It requires different kinds of persons to connect with those different kinds of populations.

CUTLER. To add to what you say, it was rather interesting talking with Dr. Ellis yesterday, who was discussing the health activities of the Black Panther group. She brought up very perceptively the fact that they had the trust of the community. It is not who we think is qualified that will be accepted by the community. In the last analysis, it is the perception by the community of the qualities of the individual that they are looking for. As Dr. Ellis pointed out, we may think that we speak for certain people, but there is a very real question of acceptance. This is one of the critical issues in reaching these groups.

ED CROSS: I would like to make a couple of comments on that issue because it interests me and concerns me when we talk about hunting for various types and identifying various types of health manpower. I think that we often forget the fact that the only way you can get into a country, particularly on the African scene, is to be invited there and at the pleasure of the host government. We do not go in there and do anything without their approval and their clearance.

Also, the success of programs that we dream up and impose on lesser developed countries will depend upon the adoption of them by the leaders of the country. We have to keep this in mind. When I was a Peace Corps physician in Ethiopia, we had an extra staff physician who had some spare time. He agreed to give half of his time to do volunteer work at the hospital. The hospital accepted his services and put him to work. About a week later, the provincial government called up and asked the doctor to leave. The hospital said he did not have official approval to work there. Even though the service was good, needed and free, we could not give the service away until the provincial governor was approached and asked, "Can this man work in your hospital?" We should keep in mind that we do not do anything in a country unless we have the approval of the hierarchy. There is no shortcut around that.

I would also like to make a couple of comments about the urban health care services and urban-based health institutions and resources. I think we have to admit that we are literally stuck with these facilities and resources. The question is, how can we more effectively use them to meet societal needs and demands?

I would like to suggest certain models. I think these institutions should be used to reach out to the community. They should take the responsibility to serve the community, not just for education and research, as traditionally done, nor to serve as a tertiary care referral center, but to be out there where the action is and help the community solve its problem.

I have two examples. One involves a project in Cameroon, where U.S. AID, with WHO and other donors, have agreed to support the operation of a university center for health sciences. This center has taken on the responsibility to train people to serve out in communities, in community medicine and community health service.

The other example is one that we have in our own country, the so-called Area Health Education Centers program that is run by the Department of Health, Education and Welfare. I think that this is the first example in recent times where a state or urban-based university has taken on the responsibility for health manpower training and education, to help communities solve their health problems at all levels.

I would like to propose that universities take on this role in which they have their senior staff people become involved and become expert in assisting African governments to carry out their health programs. So, I am proposing area health education centers that involve U.S. institutions along with the African countries or African governments. Thank you.

CUTLER: Do we have any other questions from the floor?

KENNETH BART: I am from the Center for Disease Control. Three of the panelists alluded to an issue that I thought was quite important. The comments related to the fact that the road to health sector development was strewn with pilot projects and models. The question that was left with the group was how many models must we develop?

I would propose an alternative question or an alternative explanation that in fact these models have not

been successful. They are not replicable. They are not desirable. Countries do not accept them and people do not accept them. These projects have failed. We have not been innovative, and, in fact, we must assume the responsibility. We must accept the proposition that we have invested incorrectly or in a less enlightened way. We have listened too little to the people whom we serve or attempted to serve. projects or models that we have created, rather than ask why they haven't been accepted, we must accept the prospect that they in fact have failed.

MARK RAPOPORT: I am from the Mount Sinai School of Medicine. I think that the problem of acceptance is not a simple one. The question is acceptance by whom. Certainly there have been a large number of unsuccessful models, but I think there have been a number that have been accepted at the local level by the people for whom, and often with whom, they have been designed to serve.

The question that I think our panel got into in the latter stage of our discussion was a question of acceptance by the central authorities. I think in many cases the characteristics of the program that make it acceptable at one level do not make it acceptable at the other. The question becomes one of politics, I think, and of social theory. It is very difficult to make a judgment whether a model project has as one of its objectives to be replicable. It may be that within those objectives are the seeds of failure. If a program is successful that develops a community to have a larger social and political will, that might guarantee that it will not be able to be replicated, because of the nature of the political system within a country.

I think that was something that was touched on a number of times. I think it was dealt with at some length in last year's conference. I think it is a question that really has no answer. It may be that looking at it again would not be an efficient use of time. We continually come to that dead end. Until we really look at it and see if that is a dead end or not, we may frequently end up at the same place with successful models that succeed as projects, but not as models to be replicated.

CUTLER: We will take one last question or comment.

KATHLEEN MONAHAN: I would like to go back once more to this question of change. I would certainly agree that there are many pilot projects that have been successful. But, how do you get across to people, to all of us, that some programs are good. It comes back to the whole question of behavior.

To illustrate my point, I ask you to visualize a circle. At 12 o'clock in the circle, put down culture. At 3 o'clock, put down values. At 6 o'clock on the circle, put down attitude, and at 9 o'clock, put down behavior.

When we start with behavior, we want a change in behavior. Our behavior is largely determined by our attitude, be it positive or negative. Our attitude, in turn, is largely determined by our value, and by our value I mean what is most desirable to us at any given time. This is largely determined by our culture.

In this room, values are dynamic. They are not static. Our values have changed many times. A simple example would be that a few years ago the men had short hair styles. When long sideburns and long hair first came into view, the attitude of many of the gentlemen, as well as the women, was certainly negative. But our attitudes changed because of information, because of observation, because of peer communication. So, from a negative attitude we went to a positive attitude that was reflected in the behavior of the men. I would say that, in this sense, the value of most of the men here have changed insofar that we see a lot of long sideburns. You see longer hair. You can do the same thing with the women. A few years back the dresses were long. Suddenly we saw short dresses. The value went from long dresses to short dresses on the part of some. The attitude went from negative to positive, and then it was reflected in behavior.

All I am trying to demonstrate is that basically it comes back to the fact that behavior changes are based on values. We have many pilot programs that show that they are effective. How do we get this across to our people? We are talking about retraining. If we want behavior changes, it is not information alone that will result in this.

Some people will be changed by information. In other cases, it is identification with needy groups. It is peer relationships. We have to think in terms of retraining and reeducating, not just with our people at the consumer level, but our trained professionals. Perhaps one mechanism would be more workshops that

involve not only information, but participants to identify with the needy group. My suggestion would be to have more of this coming into existence.

CUTLER: On that note, we will bring this session to a close. We have heard very eloquently and feelingly some of the problems that are felt by all of us. We are also very well aware of the complexity of change. In fact, when we think about the dynamics in the change of the quality of health, it becomes very obvious that it isn't merely a matter of technology. It is not merely a matter of knowledge of what to do. We are concerned with the very basic elements of human and institutional growth, development and behavior. If one can come back to the adage from the comic strip, Pogo: "We point the finger to ourselves and say the enemy is me." We have very much to do.

Rather than closing on a negative note, one cannot help looking at the accomplishments, shall we say, in terms of the conquest of smallpox. One can look, of course, upon the results of the work in malaria eradication in many other sectors and say that we have accomplished something. The reasons for this success have been well documented, but we always come back to the individual and the political and social systems. One of the things we had hoped to do in this conference was to be able to bring together the various groups involved. We are speaking not only of government organizations and voluntary organizations, but of individuals as well.

We have much to learn from one another. We have been together and worked towards this, and we are benefitting from the interplay. We now recognize fully that no one individual does it all alone. We are completely interdependent in bringing about changes that are needed, if we are to improve the quality of human life and dignity.

We do not have all the answers yet. We do, however, have a great many answers, and I would like to end on this note. Let us build on what we have. We know some of the things that we have to do, and I think our responsibility as individuals and groups is to see to it that we begin to attempt to use more effectively and better the models that we have. On that note, I would like to thank you all for your participation and attendance at this conference.

HENRY FEFFER: I cannot think of ending this meeting

without mentioning a person who is probably one of our greatest sources of strength in the inception of the NCIH. He is here now. George Tolbert, I wonder if you could say a few words, because you were so important in the development of this Council. I know that your work obligations have become impossible and you have to keep a low profile in the Council, but all of us would like to hear a few words from you.

GEORGE TOLBERT: Thank you very much, Dr. Feffer. I do not have much to say, except that I am very pleased with what I hear and what I see. These deliberations are so important. We do not have a lot of answers many times. But the effort to secure an answer, the effort that goes into good minds coming together and meeting like this, is the only good thing that leads eventually to some solutions.

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