# INTERNATIONAL PERSPECTIVES ON MEDICINE

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It is an honor for me to have the opportunity tonight to participate in this Symposium and to share the podium with distinguished colleagues from Mexico and other parts of the world. It is a special pleasure to do so at the advent of an auspicious, exciting moment in the history of the National Institute for Public Health - the impending transition from temporary quarters and scattered offices to its own permanent building.

When an organization moves into its own facilities, it acquires a new identity and recognition; its potential for fulfilling its mission and indeed its catalytic impact can be greatly heightened. I note this from the personal experience of having participated in the work of the U.S. Centers for Disease Control both before and after it occupied its first permanent building in 1960 and similarly with the World Health Organization which occupied its first permanent quarters in 1967. I am wholly confident that the performance of the National Institute for Public Health will repeat these positive experiences.

To generalize about health internationally is presumptuous and somewhat dangerous for a number of reasons. Problems differ widely from country to country as do their socioeconomic capacities to address them. The world is often divided, simplistically into broad categories of developing and industrialized countries or segmented into first, second, third and fourth world entities. In fact, as we all well know, there is a spectrum of development encompassing all manner of differences. Moreover, each country views health in development in its own way with widely varying perceptions about its importance and the resources which should be assigned to it. Finally, each one of us, I am sure, perceives

present realities and potentials for change from quite different perspectives.

Thus, I offer but one person's perspective on transitions in international public health tonight - at a time when I sense that important, major transitions are beginning to occur - but only beginning. Whether these changes are prelude to a new and very different future can legitimately be argued. I personally am an optimist - as I believe one must be to practice public health - and thus my belief is that major transitions are before us which portend healthier societies and a better quality of life for communities throughout the world. To accomplish this, however, will require the very best of the disciplines and practitioners of public health as they are the key to the future.

I shared with you last year my perception that the agenda of the past three decades has been overly dominated by concerns for curative, diagnostic and rehabilitative medicine - and with cause. The cornucopia of biomedical research has provided all manner of new tools and methods for intervention. We have responded with greatly increased numbers of hospitals and physicians and much increased access to curative services. There is no question but that the status of health and quality of life have improved for many <u>but</u> the costs for health care have been mounting logarithmically in all countries. At the same time, the improvements in health status have been increasingly marginal and large numbers of persons are still unserved. This had led to increasing discomfort in all countries and a recognition that something simply has to be done,

something has to change but how can change be effected given the stringent fiscal problems in most countries.

The Alma Atta Declaration in the late 70s was one manifestation of this concern - it called for a new emphasis on primary care and the slogan "Health for All in the Year 2000." At WHO, as well as national government levels, there was confusion as to the meaning of the Declaration insofar as health policy was concerned. By and large, it was interpreted to mean that there was a need for an increased number of primary health centers albeit with little concern for what such health centers actually did or contributed. New centers were built but most were, in fact, little more than physicians' offices in rural areas, primarily or exclusively concerned with curative care. Creating more such centers achieved some greater equity of access to care but most were and are unsupervised; few are adequately supplied with even the most basic necessities; and few indeed were or are concerned with preventive interventions.

A second and more appropriate manifestation of one response to health care concerns has been the emergence of "community-based" programs. These offer quite a different potential. The first of the community-based programs was the family planning program which began in the late 1960s. It was evident from its inception that successful programs required workers to go into the community - to educate, to persuade, to provide services and supplies. Primary health centers were neither organized to do this nor did their professional staffs have the skills to do so effectively. Because of this, special organizations

were created and programs of a quite different character than those conducted by primary health centers.

Smallpox eradication began about the same time and our initial experiences in obtaining support from the primary health centers proved to be as disappointing as with the family planning program. Almost no health centers had vaccine and even those which were supplied with vaccine, seldom administered it. Few of them reported cases of smallpox or took measures to contain outbreaks when they occurred. We discovered, however, that after health workers had been provided some training, ongoing supervision and supplies of vaccine, most responded with interest and sometimes, enthusiasm. This required the creation of a special organization for smallpox eradication but, in most countries, the numbers did not need to be large, as there were already substantial numbers of underutilized health staff already in the field.

The success of the smallpox eradication program gave confidence to many health authorities in their ability to achieve important, defined objectives with minimal additional resources and encouraged political leaders to provide those resources. Thus, when an expanded program on immunization was proposed, it was received with enthusiasm. The objective of this program was to provide vaccine protection to the world's children against six major diseases - diphtheria, pertussis, tetanus, measles, poliomyelitis and tuberculosis. The vaccines were well-known and widely used in the industrialized countries; they were effective and inexpensive. However, not more than perhaps two to five percent of children in the developing countries were being vaccinated.

Instead, substantial resources were being expended in treating these diseases when they occurred and in rehabilitating those who were crippled by them. As with the family planning and smallpox eradication programs, community-based programs were necessary. Generous resources began to be made available in quantities far exceeding those made available for smallpox eradication. Many organizations have been and are participating - UNICEF, the InterAmerican Development Bank, Rotary International, USAID and many other national and international bodies. In scarcely a decade, vaccine coverage has risen from less than 5 percent to more than 50 percent. Poliomyelitis control has been so successful in the Western Hemisphere that an eradication program has been launched and this year, the World Health Assembly decided on a global eradication campaign.

Meanwhile, an important discovery was made with regard to the treatment of diarrhea. It was found that many deaths due to severe diarrhea could be averted by the oral administration of a simple salt and sugar solution. UNICEF ordered its first million packets in 1975; the supply lasted some 18 months. Today, more than one million packets are used daily. How did this program come about? It required the education and motivation of mothers throughout the community and the widespread distribution of these packets - again, a community-based program.

Finally, Dr. Al Sommer and his colleagues at Johns Hopkins and in Indonesia, discovered that the administration of a single capsule of Vitamin A once every six months - a capsule costing less than U.S. $0.10 - resulted in a 35-40 percent decrease in deaths due to

respiratory and diarrheal disease among children under five years. Marginal Vitamin A deficiency was the underlying cause and it proved to be far more widespread than any had believed. UNICEF and WHO agreed that Vitamin A should be provided in all countries where measles death rates were one percent or greater - a surrogate measure of vitamin deficiency. How best could one administer Vitamin A? Not through the mechanism of providing Vitamin A to those who attended primary health centers. This, too, required a community-based program.

All of these interventions are based on prevention or amelioration of disease throughout a community. The programs require special skills in communication, community organization and management - skills of a different type than those which have been conventionally taught in medical schools or in training programs for health workers.

To determine whether or not the programs are succeeding requires ongoing measurement of numbers of newborns, cases of diseases and numbers of deaths. This process is called surveillance, a practice which to date has received little attention in our so-called health systems. Until now, the principal concern has been quite simply how an individual patient responded to a prescribed treatment.

In developing surveillance systems, we are now beginning to think in terms of the status of health throughout a community. The result is that attention is beginning to be paid to the application of epidemiology to the strategy and design of programs and in the solution of health problems. The United States has now formulated an array of

health goals for the nation to be achieved by 1990 and by the year 2000. Most countries in Europe have now done the same. In consequence, they are beginning to examine both new strategies, as well as more appropriate allocations of resources. Similar initiatives are beginning in other countries.

In examining surveillance data and assessing our most important problems, we discover that what are most urgently required and most important to the health of the community are programs embracing disease prevention and health promotion, many of which require behavioral modification. We find that we have few persons with skills in implementing such programs and a health structure which is ill-adapted for developing and executing such programs. Rather, we discover that we have a patchwork of curative care services which one observer described as "a health care system desperately in need of a central nervous system."

It is my belief that progress will be slow unless and until we develop appropriate academic centers which address these problems - centers which bridge research and practice, which embrace large population laboratories which can help us to learn and which can provide education and training most appropriate to need. Quite clearly, these are not easily implanted in medical schools whose orientation is the care of individual patients. Rather, I believe the need is for such as schools of public health and for institutes such as your own. That an increasing need is perceived for such centers has become evident over just the past few years. Indeed, I am aware of at least a dozen

countries which, during this brief period, have decided to establish new schools or institutes of public health.

My perception is that there is a growing global interest in public health and community-based health programs. With current advances in biomedical research and a growing awareness of the importance of the social sciences, much more is promised. The important question now is "can we sustain this momentum?"

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