RESPICE, ADSPICE, PROSPICE[5]

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On the great seal of the College of the City of New York there appears a three-headed figure with a Latin legend that is particularly apt for an academic institution–*Respice, Adspice, Prospice*. The figure and legend apply equally well to the continuing task of public health–to learn from the past, to confront the present, to do better in the future. Given this broad context one can hardly project the state of international health at the beginning of the next century without taking into consideration the framework of the past and present.

The beginnings of international health concern and collaboration revolved about the protection of the peoples of various individual nations against dangers and diseases which might be brought to them from other countries. Only in the twentieth century was concern extended to broader concepts leading, for example, to cooperation in attacking environmental problems, strengthening national and local health services, improving educational institutions and techniques for preparing health personnel, fostering collaborative research, and broadening exchange of scientific information. The countries of the Americas can take particular pride in having led the world in demonstrating how an effective, truly international organization could be built and supported.

One may safely say today that almost all nations, individually and collectively, recognize that their responsibility, as well as their own enlightened self-interest, impels them to help in the collection and dissemination of epidemiologic, demographic and other types of data relevant to public health, and to participate actively in the exchange of technical and material assistance among the countries of the world.

The preamble of the Constitution of the World Health Organization is a remarkably comprehensive and universal document that sets a broad frame of reference for international health. In the preamble's bold and simple statement that the health of each nation is of importance to all nations, in its recognition that health is essential for peace, in its assertion that health is a human right and not a privilege dependent on particular status or resources, permanent goals are set for mankind. Written a quarter-century ago, this preamble, these concepts, these goals, will be as true and important in the the year 2000 as they are today.

Both the need and difficulty of future assessments are highlighted by current problems in many areas of health interest, notably in ecology. Each grand design for water supply or for construction of a mass transportation system has health implications that have to be dealt with on a hypothetical, presumptive basis, because the actuality cannot be tested for many years or even decades. Nevertheless, despite such difficulties, attempts to predict the health effects of community or individual actions must be a way of life. The validity of these predictions will increase in direct proportion to the completeness and accuracy of the information on which they are based and the objectivity with which the various factors are assessed.

Some of the difficulties in the predictive process are reflected in the early abandonment of the decision of the First World Health Assembly to assign "top priority" to certain subjects, specified originally as malaria, maternal and child health, tuberculosis, venereal disease, nutrition, and environmental sanitation. It very soon became apparent that such a classification was not helpful, in view of the great diversity around the world and the unpredictability and irregularity of temporal change in a given situation in a particular country. To be sure, all six of these problems still constitute major preoccupations for most of the world's population. Even in a country like the United States, four and possibly five of the six are still substantial public health problems, at least for defined segments of the population.

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In the 25 years since the Interim Commission first considered program priorities, there have been great changes in health conditions in many countries. In some areas there has been impressive and almost universal progress. Millions of persons formerly living constantly with endemic malaria are now essentially free of this scourge. Smallpox incidence has dropped dramatically–to a mere 19 cases in 1971, all of them in a single country–and other diseases, such as measles, diphtheria, and whooping cough are far less prevalent in some countries.

What is not always appreciated is that in certain instances the differences between countries with the best and poorest records have become even greater. While the more affluent countries have had striking reductions in infant mortality, to levels which might not have been thought possible a generation ago, there are still populous regions of the world where half the babies born do not live to their 5th birthday. Environmental problems have also reflected extremes. Many more communities now have acceptable water supplies, but in the "well-sanitated" countries technological progress has been accompanied by unforeseen ecological disturbances. To put it in apparently contradictory terms, things are getting worse as things are getting better.

An encouraging sign is the increase in international collaboration for health, which has been steady and of considerable scope in the past 25 years. For example, the First World Health Assembly adopted a regular program and budget of $4.7 million, while the Twenty-fifth World Health Assembly will consider an effective working budget of $90 million, to which must be added great expansion of other funds directly or indirectly expended for world health. Many believe that still faster growth in program and budget was possible and that the results would have been much more productive. The demonstrated effectiveness of what has been accomplished is testimony for this point of view.

Against this background, what are likely to be the problems at the beginning of the next century? Surely the preamble of the Constitution of the World Health Organization will have become even more vital, with greater recognition that health is more than the absence of disease and infirmity. Attention to health aspects of the environment will hopefully have paralleled the general increase in public concern for ecology. If the advice of health experts is utilized to a far greater extent than at present, this should foster a better and healthier life. The monumental worldwide needs for adequate water supply and acceptable housing may be reduced quantitatively, but the residue will be far greater than any accomplishment foreseeable at present. Major research needs to be done in the economic and technical development area, for the health benefits of adequate water and housing are well understood. By contrast, we know far too little of the balance between benefit and danger of pesticides. Pollution of the air by gases, by particulate matter, and by ionizing radiation needs far more quantitative as well as qualitative evaluation.

Greater control of the biological environment has been one of the triumphs of public health and is likely to progress at an even faster pace. This very progress, however, brings its own dangers, which are likely to be exaggerated in coming years. Even now, there is a kind of smug acceptance that low rates of infectious disease will continue indefinitely, and there is corresponding negligence of the kind of vigilance necessary to maintain control. With further and more widespread progress will come even greater danger and correspondingly greater need for effective health organization and surveillance. Hopefully more progress will have been made towards the eradication of malaria and tuberculosis, yet the growing size of the task, in part because of the influence of political disturbances and warlike operations, plus unwillingness of the Member Countries to commit the necessary resources, makes many health workers skeptical that the goal will have been reached by the opening of the twenty-first century. There is perhaps more hope of smallpox eradication, but only if initial successes can be consolidated and advanced by greater mobilization of resources.

Far greater expansion of health services, national and international, will be required if

we are to extend more broadly the well-proven and available preventive measures for such diseases as diphtheria, tetanus, whooping cough; to correlate activities with the agricultural sector so that food shortages may be eliminated as the cause of malnutrition; and to so organize a medical care system that those diseases which do occur will be treated promptly and adequately.

If we are to think seriously of ever attaining the WHO definition of health we must improve the intrinsic nature of human beings, a highly complicated task. It is likely that we can carry out more effective guidance of human growth if we capitalize on existing and prospective possibilities for better knowledge of the physiology and psychology of nutrition and achieve more balanced food production.

One may hopefully contemplate a substantial increase in productivity of genetics research, but application of this knowledge to society will not be easy. Decisions on family size and child spacing are directly affected by the complexity of human traditions, needs and emotions. Many believe that natural interests and instincts will work for betterment in the long run, provided that there is continuing expansion in knowledge of family planning techniques, in discovery of more effective contraceptives, in effective revision of legislation, and in development of a distribution system so that all methods are equally available to all—regardless of social or financial status.

To accomplish the above, better and more comprehensive public health organization will be a major consideration. There is enough knowledge now to establish a sound base for such organization everywhere; but there is great need for continued research on administrative technique, and on the most effective way to deploy all varieties of health manpower. The relation of health planning to total social and economic development is only beginning to be understood, and health planning will surely become a more central concern for all national health administrations. In this regard, many believe that the World Health Organization ought to undertake a greatly expanded role in establishment of regulations and standards and in the monitoring of national performance in complying with these. Obviously, such a course of action would require even more extensive collaboration among the member countries. It would not, however, involve any loss of national autonomy, since the Organization's role would still be one of reporting findings, leaving further action within national boundaries to the individual countries.

Perhaps the greatest discrepancy in the health field is between our progress in relation to physical disease and our slowness in regard to effective and validated treatment measures and preventive techniques for mental disease. The task is obviously more difficult and more complex than the relatively simple bacterium-human being relationship, for example, but this ought to be an incentive rather than a deterrent.

No amount of development of health manpower, health organization or health technique can be truly effective without improvement in health knowledge of the public. In some areas, for example, the role of the health professional has been so emphasized as to create an overdependence on him. Education directed at each person, and at his family, neighbors, and place of work, ought to result in better health knowledge and in development of better ways of selecting persons needing the attention of health professionals, to insure more effective utilization of the latters' time.

Finally, one can only hope that the world will resolve some of the great issues which bear more potential for man-made dangers to health than those which nature can devise unaided. The threat of ionizing radiation derives from expanded medical and industrial use, but even more from the risk of a worldwide nuclear holocaust. For public health to develop adequately, the need for peace is absolutely basic. Conversely, peace for the world in the year 2000 may well depend upon progress in achieving health.

Will international collaboration and understanding continue to grow? Can the countries agree that the health of all men is so great a good, so much a prerequisite for "the pursuit of happiness," and so obvious a route for general

improvement of international relations, that not only must a larger share of national resources be devoted to health, directly and indirectly, but that war and famine need eradication as much as pestilence? Man has the capacity for this. Will he use it?

MEASLES IN THE UNITED STATES OF AMERICA

In the first 16 weeks of measles epidemiologic year (EY) 1971-1972, 7,006 cases of measles were reported in the United States. (The measles EY begins with calendar week 41 and ends with week 40 of the following year.) This figure represents a decrease of 42 per cent from the 12,069 cases recorded for the same period in EY 1970-1971, and approximates the number of cases noted through the first 16 weeks of EY 1969-70.

This decline coincides with a significant increase in the distribution of measles vaccines. A total of six million doses of live measles vaccine were distributed in 1971, the largest amount in any year since 1967 and a 23 per cent increase over the amount distributed in 1970. The decline in cases also coincided with an increase in measles immunity levels from 57.2 per cent in 1970 to 61.0 per cent in 1971 among 1-4 year olds, and from 62.8 per cent to 69.7 per cent among 5-9 year olds (data based on the United States Immunization Survey). In one large measles outbreak investigated in EY 1971-1972 the overwhelming majority of cases occurred in unvaccinated children, and vaccine efficacy was found to be 91.5 per cent. [*Weekly Epidemiological Record* of the World Health Organization 47(12)132, 1972.]