

Presentation to Canadian Health Officials  
Regarding the Education of Local Medical Officers  
(Dictated Rough Draft from Notes)

8 January 1981

Ottawa, Ontario, Canada

For the past three years, we have been conducting at the Johns Hopkins School of Hygiene and Public Health what amounts to an ongoing review of the future of public health as we see it; of existing programs, our structure and organization; of our curriculum and projections as to the shape and nature of the School as we see it in the future. Various committees have addressed components of these various questions and, in the course of the evaluations, have consulted with faculty, present students, alumni and others concerned with the broad field of public health. A number of changes have occurred at the School, more are imminent and soon to be announced, while others are still in the formative phase.

I would not wish to represent our views or directions as typical of schools of public health throughout the United States since the schools in the United States differ greatly in size and character and various of the schools are responding differently at this time to the new problems and initiatives of the future. What does seem to be clear however, is that most, if not all, schools do see the need at this time to reevaluate their mission and to redirect their activities. More than this, I would not wish to assert that the views I express are unanimously held by all faculty but they are, I believe, reflective of the directions held by most to be those which we should be taking and are now beginning to implement.

I should first offer a word about the School of Hygiene and Public Health for those of you who are not fully familiar with it. You should know that it is the oldest school of public health in the United States and now the largest. Our full-time faculty numbers approximately 280 with a part-time faculty of approximately 200. We enroll approximately

800 students of which approximately 20% are from other countries. More than 60% of our students are over 30 years of age, reflecting the fact that many are at the School to receive education at a mid-career level. Our budget this year will be approximately \$35 million. We place a strong emphasis on our doctoral programs and currently grant approximately 20% of all doctoral degrees which are granted by the 22 schools of public health in the United States. Administratively, we are an equal partner with the School of Medicine and conduct many programs in common with faculty from the School of Medicine.

It has been my feeling that schools of public health, including our own, have been primarily research and educational institutions which have embraced a minimal "service" activity or, if you will, a limited series of activities relating to the clinical practice of public health. Until recently, I have sensed that many of the schools have maintained a fairly traditional posture more relevant to the past decades than future decades, emphasizing conventional public health administration, environmental problems of sanitation and sewage and education pertaining to current areas of programmatic interest, such as maternal and child health, the control of microbial infections, etc.

We see the field of public health today to be changing and we would expect more rapid change over the coming 20 years. The dimensions of change are difficult to anticipate, but certainly the practice of public health 5 or 10 years hence will be quite different than now. What are some of the characteristics of the change?

1. We see the problems of the environment to be important components of public health practice. Local health officers now tell us that 40 to 75% of the problems they face deal with environmental issues. We see these issues becoming more complex with a greater emphasis on monitoring, legislation, on alternative methods for control. There are today very few educational institutions which embrace the variety of disciplines needed to address current problems. Needed are physicians,

toxicologists, epidemiologists, biostatisticians, behavioral scientists, chemists and others. The problems will be able to be solved only by interdisciplinary cooperation, and yet, there is no center except in schools of public health where all of these uniquely trained people come together. The schools of public health have an obligation to vastly expand and elaborate on this activity.

2. As a society, we have only begun to face the financial, ethical and practical problems in the allocation of health resources. The resources which we now allocate for health are expanding steadily but the demand market is expanding logarithmically. We are troubled as to how best to provide health services to a total population and what health services represent a right rather than a privilege. We've only begun to address a problem which inevitably will be one of the major problems of our society.
3. In the field of public health, increasingly complex management decisions are required to intelligently allocate resources. Many are being trained in health management to meet this need. However, unless we are to fall into the trap of contemporary American industry, we will need most urgently managers with a broad comprehension of human health biology to discover needed unorthodox decisions to cope with difficult problems. As has been so well documented, one of the chief problems in American industry today is that chief executive officers have been increasingly drawn from a pool of accountants and lawyers rather than technologically knowledgeable people. Inevitably, the result has been to focus on bookkeeping and accounting rather than on innovation or longer-term change.
4. Various estimates have been made in regard to the manpower needs for public health. All inevitably have had to draw on the trends of past decades and, while such estimates are welcome, it would seem not illogical to anticipate that with

increasing change and an increasing need to rationalize our resources, manpower needs will be substantially greater than any now forecast.

5. Basic to the success of whatever changes occur will be first-rate people who are innovators and leaders. Although many now bemoan the fact that there are insufficient capable people in the field of public health, we sense that we are seeing now more individuals of higher calibre expressing a keen interest in making a career in the field. It is difficult to identify the factors which contribute to this change. My own sense is that a career in public health now recognizably permits a living wage, although recognizably lower than that provided in private practice. Students who are concerned about societal issues now see the possibility of making a living wage and yet contributing significantly to resolution of problems. Thus, I do feel that we can anticipate more persons of excellence participating in and contributing to the field. However, to permit them to do so, we must provide them with training support. Inevitably, they will be sacrificing income over their longer-term career life and to expect them to pay for the education places a very difficult burden upon them. To expose physicians of real competence to the potentials in the field of public health, I believe we will need to do so primarily after they have completed their medical school training or in settings other than the undergraduate medical school. The young physician in training is fully preoccupied with learning the skills necessary to apply curative medicine. If we can broaden his vision to understand that there are numerators and denominators, I believe we have probably achieved all that is possible. When he has completed his undergraduate training and has some confidence in his skills in curative medicine, I believe that he will be receptive to looking to alternative career pathways. We need therefore to have individuals working with interns, residents, / younger faculty,

those in practice, etc., who are persons of excellence and who can be seen as role models, if you will, for a future career. The belief that by teaching public health imaginatively at the undergraduate level to attract physicians into the field is, in my view, futile.

An important component of the schools' activities for the future, in this period of change and accelerating change will be the need to sustain a sharp edge of relevance to contemporary issues and to do so, faculty and students will need to be at the "patient's bedside," no less than internists and residents in the Department of Medicine need to be at the bedside in the ward sharing in the responsibilities of patient care. For this reason, we at Johns Hopkins have asked local health departments and industry to join with us in permitting us to work with them at the public health bedside. Their response has been most encouraging and the result is a developing new partnership and a new relevance in teaching and research.

To meet the needs of the future, we are now in the process of examination of our MPH program and this is being revamped. In all probability, the program will move from a nine-month to a twelve-month academic program with a core curriculum focusing heavily on epidemiology-biostatistics, management science and environment. I would project that perhaps 40% of the curriculum will focus on analytic principles relevant for application over the long-term and that the balance of their curriculum would be primarily what one might term "state of the art" reviews. Recognizing the need to provide education to those who at mid-career decide to enter the field of public health, we have decided as a matter of policy to develop an extended MPH program which would include courses given in compressed segments, in the evening, in some off-campus sites, etc., to permit more part-time education.

Absolutely vital in the years ahead will be continuing education. The schools of public health have lagged far behind the schools of medicine, for example, and yet with change occurring so rapidly as it is, there is

absolutely no choice but to broadly expand our continuing education program. This we are now doing. Of particular interest have been weekly grand rounds in preventive medicine, modeled after the grand rounds in internal medicine, to which are invited public health people throughout the community. If we can identify suitable sources of funding, these may in the future be taped and distributed widely for use in health departments wherever they may be.

Now under consideration is a professional two-year academic doctor of public health program which would serve to provide in greater depth exposure to the range of complex contemporary public health problems with particular specialization in, for example, environmental health, drug-alcohol abuse, etc. This is still in the discussion phase, but it is in my view a program for which there is an urgent need.

Beyond what this School and other schools are doing, I believe many of us feel that there is now an urgent need to redefine our profession in terms of standards of excellence and leadership commensurate with the complex needs and challenges of the next two decades. We need to define and insist on standards for training programs. Any number of community colleges are now offering programs termed "health management" or some such title and which draw on a faculty of two or three people, with perhaps the local hospital administrator thrown in to permit the term "health," to be appended to the title. Courses of this type we do not need! We see in many medical schools training being offered in community medicine with the degree master of science <sup>and</sup> ~~and~~ community medicine being offered. Few of these, in my opinion, bear any stamp of quality. Few have more than a handful of faculty and few have more than a handful of students. One simply cannot provide an education extending over the diverse spectrum of public health in such a setting. Thirdly, there are so-called residency programs which have been certified in all sorts of different settings, <sup>Many</sup> ~~Many~~ which I have seen represent nothing more than an individual filling a slot without specific supervision, and with no plan for the individual to be exposed in the worksite to any particular set of skills or challenges. They are residency

programs in name only. In brief, one sees today all too many so-called programs of training in public health, in health management, etc., which really wouldn't be certified by any board for much of anything outside of our own field. We cannot continue long in this mode. Vitaly needed are centers of excellence incorporating a multidisciplinary faculty of sufficient size to provide the breadth and depth of education now so vital in public health. I have no formula to offer as to the size of such a faculty to constitute a critical mass, but I would venture to say that it would be difficult today to identify any school of public health worthy of its name which included less than 50 full-time faculty.

It is not for me to suggest to Canada what sort of an educational structure should be provided for public health. However, I believe it is absolutely vital that Canada have a school and a faculty of size and competence able to examine Canadian public health programs and policies and to identify directions for itself for the future. Scholarly study of the health system and its many ramifications cannot and will not be done adequately by scholars in the United States or in any other country. From the standpoint of an American institution, I believe our public health effort will be stronger if we can collaboratively work with a Canadian academic institution in comparative health policy analysis and evaluation.

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