The Three Deans Presentation

Johns Hopkins

September 5, 2006

I suppose we three Deans might have been otherwise billed if only we were all tenors and could sing but, fortunately, you will be spared that. However, as I thought more about the billing, I wondered if another label might not have been considered -- the three wise men -- but I believe Sylvia knows us well enough to discard that appellation. Fortunately, she did not decide to call it a presentation by "the neophyte dean and the two old fogies". Thanks, Sylvia, for keeping it simple.

Our task has been defined as that of reflecting on past experience to identify trends in public health and to speculate on its future as much as our cloudy crystal balls might permit and, finally, to offer some gratuitous advice which may provoke response from our audience. The challenge of taking not more than 10 minutes to so reflect, forces a serious effort at oratorical brevity, a skill which is wholly unfamiliar to Deans. And, so, in a spasm of concern, I concluded there was no way to keep me in check than to have a written script.

As we look to the future, it is important to recall that it was less than 100 years ago that it was recognized that there was sufficient known -- and potentially able to be implemented in disease prevention and control -- to warrant establishing a school specifically for public health. Thanks to the Rockefeller Foundation, 18 students in 1918 enrolled at this, the first school of public health. The need was clear. A 1921 JAMA article estimated that there was a need for 7000 trained medical directors for state and local health departments. Hopkins, at that time, enrolled just 26. Time has been required to define more clearly and to populate what is still a very young field. Much remains to be done. Redefinition and change have to be the order of the day. Public health is vastly different today than it was 50 years ago when I entered the field; the future promises greater change.

During my career, one field in which I have had a particular interest has been been marked by the development of dramatic new directions – the field now termed vaccinology. In 1955, the only two vaccines in common use in the U.S. were DPT and smallpox vaccine while, in the developing world, there was little more than smallpox vaccine, most of the vaccine being of doubtful or nil potency. Under WHO, smallpox eradication began in 1967 and, with countries

throughout the world joining in the effort, the last case occurred just 10 years later. Measles and polio vaccines came into wider use and in 1974, a greatly expanded global immunization program was launched that increased worldwide coverage for DPT, measles and polio from only 5% to more than 80% in just 16 years. Lessons were learned about quality control for vaccines and vaccine delivery; research and development grew logarithmically as we learned more about pathogenesis and immunology; a World Bank study demonstrated vaccination to be the single, most cost-beneficial of all medical interventions. Today there are vaccines that prevent cancer of the liver and cervix. More vaccines are on the horizon; new methods for application are developing and new avenues for production of vaccines at lower cost are anticipated.

Another potentially seismic change is the growing recognition that the burgeoning therapeutic miracles of medical science will not begin to realize their potential until we have a health care system -- and one that provides for universal coverage. Research, development and practice in health care management and finance have become infinitely more sophisticated; a ground work is being laid for a rational health system; and, given the current sad state of our so-called system, the crisis point is approaching when major changes will have to be made. Here, public health has to assume the leadership role, one that would be difficult to discharge were it not independent of a School of Medicine. So the wisdom to found such a professional school -- to have two doctoral programs, one that provided for the training of public health leadership (DrPH) and one that provided for relevant research in disciplines that could provide new tools and new insights (DSc). Since the 1920s, tens of thousands of professionals from other countries have also participated in the educational fabric of this School, learning and enriching at the same time. Indeed, as long ago as the founding of the World Health Organization, many of the architects were Hopkins alumni. The future portends an even greater need for international cooperation and sharing of experience and initiatives. Health programs are of special importance and have proved to be among the most effective and least controversial bridges that can be developed. Under a more enlightened federal administration, I believe that there will be opportunities for substantially expanded efforts that have special relevance to public health.

I could go on to cite the many dramatic changes that are occurring in other fields of special relevance to public health – from molecular biology to family planning to the measurement sciences. All have changed dramatically in the past 50 years and each promises far more than might have been dreamed of as little as <u>10 years ago</u>. There is no greater challenge or

satisfaction than being at the forefront of change, innovating where there is no blueprint and translating into practical reality the dramatic changes today in the scientific and social world. There are today more opportunities in public health than at any time in history.

I would like to conclude with a cautionary note specifically about what I have come to realize is the most important underlying problem for security which peoples throughout the world now face and unless forthrightly dealt with could paralyze all other efforts. It is highly relevant to public health. A very brief story. It took place in August 2001, only weeks before 9/11. There was a three day conference held in Aspen, Colorado, that was convened by Fortune Magazine. It was intended to examine future challenges to civilization and to be the basis for a future issue of Fortune. To this conference, they invited what they said were the 100 brightest people they knew. I had to conclude that since I was invited, Fortune must not have known many people. Whatever. Most of the 100 were CEOs, generally a conservative group, but also included were Bill Clinton, Madeline Albright, presidents of several universities, etc. On the last day, each person was given a wand to be used for voting on a variety of questions. The concluding vote was to offer a summary opinion as to what was the most serious issue for global security over the coming 25 to 50 years. Included on the list were such as food shortages, water scarcity, migration, overpopulation, global warming, and others. A serious case could be made for crises in each of these areas but the majority decided on a quite different problem – the disparity between rich and poor – and, do recall, this was not a liberal group. For we, as public health professionals, this is a critical factor to weigh whatever the problem. In the U.S., as gated communities have proliferated and tax breaks have been granted to the most prosperous, it is apparent that this concern has received little consideration over the past 6 years. Hopefully the future will be better, for this is an issue beyond humanitarian concerns; it is a crucial element for global survival.