

THE EMPOWERING LEGACY OF ACADEMIC PUBLIC HEALTH

Address upon receiving the 2016 ASPPH Welch-Rose Award for Distinguished Service to Academic Public Health

Presented by President Julio Frenk at the Association of Schools and Programs of Public Health Annual Meeting in Arlington, Virginia on March 22, 2016

Dear colleagues and friends:

It is an honor to be the recipient of the 2016 ASPPH Welch-Rose Award for Distinguished Services to Academic Public Health. I would like to thank Chairman Gary Raskob, President Harrison Spencer, and the selection committee for their generous decision.

It has been seven months since I started my post-dean life as President of the University of Miami, and I feel privileged to return to my academic roots in order to receive an award from an association that has made so many contributions to public health. The moment could not be more propitious to commemorate the publication of the Welch-Rose report 101 years ago. At the dawn of the 20th century there was a period of intellectual effervescence in the United States that radically changed the education of health professionals.

In 1910 the publication of the "Flexner Report" established the modern basis for medical education not only in the US and Canada, but around the world. Only five years later, the course of public health education was shaped in a similar way. An intensive and sometimes passionate series of explorations, discussions, and meetings over the course of several years finally yielded the seminal Welch-Rose Report, published in May of 1915, which had been preceded two months earlier by the influential article "Courses and degrees in public health work," written by Milton Rosenau in the *Journal of the American Medical Association*.

As you know, the Welch-Rose Report outlined a system, initially targeted at the control of infectious diseases, which was university-based, research intensive, and independent of medical schools.²

^{*}President of the University of Miami and former Minister of Health of Mexico (2000 - 2006)

One of the most interesting aspects of this intellectual revolution was the fact that these reports and articles were actually translated into action. In the case of public health, they led to the strengthening of the Harvard-MIT School for Health Officers and its eventual transformation into the Harvard School of Public Health; the creation of the Johns Hopkins School of Hygiene and Public Health, with William Welch as its first Dean; the spread of this educational model throughout the United States; and the professionalization of public health worldwide.

A lot has changed since then. My own professional journey, which covers about one third of the centenary tradition of public health education, clearly illustrates the dynamism of our academic field.

That journey began with my decision to study medicine. Although that choice took shape over several years, there was one distinctive experience, one turning point that crystallized my decision. I grew up in Mexico with a strong sense of indebtedness, of the need to give back to society. This feeling was borne out of the experience of my paternal family, who were forced to leave Germany in the 1930s. They escaped to a much poorer country, yet one rich in tolerance and open to diversity, which welcomed them with open arms. That country—Mexico—saved their lives and made my own life possible.

Until I was 16, I did not have a clear idea of where my sense of indebtedness would lead. I decided to spend the summer before my last year in high school living in a very poor indigenous community of the state of Chiapas in Southern Mexico.

At the time, I was trying to decide whether I would study medicine, like the three generations of Frenks before me, or anthropology. I went to Chiapas because there was a famous anthropologist working in this little town, and I wanted to see him in action.

One day, while sitting in a health post with the anthropologist, in came a very poor woman carrying her grandson in her arms. It was very cold—we were way up in the mountains—and she had walked more than three hours to get this sick child to the town's clinic. While traveling, she had injured her head, so when she arrived, she was completely covered in blood—in need of care for herself as well as her beloved grandchild.

And there was no one.

The person who took care of the health post was not there, and the anthropologist couldn't do much to help. And, of course, neither could I. Neither could I. For me, this was the turning point. I remember thinking: I am not only going to study these people, I am going to serve them.

Many—perhaps most—of you have such stories. The facts may differ, but the dynamic is the same. A personal experience plants the seed for something far greater. We are moved to engage with—and transform—the larger world.

Each of us faces a fundamental choice between indifference and caring. Then—once we have decided to care—we must choose where to focus our efforts.

For me, medicine was the obvious first best choice. And when I finished my basic medical training, I decided that instead of following a clinical career, I would study public health, so I could deal not just with the consequences but also with the root causes of poverty and injustice underlying the plight of

that poor woman and her grandson. I went to the University of Michigan in Ann Arbor, attracted by the luminous scholarship of one of the giants of our field, Avedis Donabedian, who became my mentor and nourished my ability to think in a rigorous way—whether to design a research protocol or find a creative solution to a complex policy problem.

Shortly after finishing my graduate studies, I returned to my home country where I had a breakthrough opportunity to become actively involved in a collective effort to build new academic institutions. In the mid-1980s, Dr. Guillermo Soberón, an enlightened minister of Health in Mexico, decided to establish the Center for Public Health Research to generate the required evidence base to guide a comprehensive health system reform.

This Center evolved into the National Institute of Public Health, which has become one of the leading institutions of higher education and research in the developing world and was the first non-US member of ASPPH.

I had the privilege of serving as the founding director of both the Center and the Institute. Their organizational design was based on a deep reflection about the existing ideas of public health and the need to develop a clear conceptual framework to orient a new research and education agenda.

The basic ideas of this framework were discussed in a paper with the title "The new public health," which I published in the 1993 *Annual Review of Public Health*.³ In this article I tried to define 'public health.' According to the proposed framework, the term 'public' refers to a level of analysis—the population level—, while the term 'health' comprises both the health conditions of a population and the organized social response to those conditions as it is structured through the health system.

I also conceptualized public health as both a multidisciplinary field of inquiry and an arena for action. Finally, I explored the intellectual evolution of the field, which has at times focused on the prevention or management of disease, and at others encompassed a broader concept of health to include human development and well-being; it has also evolved from a narrower view of the individual or family as the object of intervention, to a more comprehensive focus on the biophysical and social environment within which people live.

I should say that, with time, I came to regret the choice of the title of that paper: "The new public health." Through a subsequent bibliographic exploration, I realized that the idea of a 'new' public health is not itself new. In 1913, Hibbert Winslow Hill gathered in a volume a set of lectures he had delivered the two previous years. The title of this volume was The New Public Health.4 What was Hill referring to when he spoke of the 'new public health' back then?

In light of the advances of microbiology a few decades earlier, the 'new' was the search for the specific agent of each disease. This vision allowed for the individualization of health problems, in opposition to the previous notion that looked for the causes of diseases in the non-specific influence of the environment. Thus, Hill was able to offer the following distinction:

"The essential change is this: The old public health was concerned with the environment; the new is concerned with the individual. The old sought the sources of infectious disease in the surroundings of man; the new finds them in man himself." ³

Sixty-eight years later, in 1988, the British authors John Ashton and Howard Seymour published another book with the title The New Public Health—apparently with no knowledge of Hill's contribution, which they don't cite. Now the definition was exactly the opposite of the one offered by what we could call the 'old new public health:'

"... [T]he New Public Health goes beyond an understanding of human biology and recognizes the importance of those social aspects of health problems which are caused by lifestyles... Many contemporary health problems are therefore seen as being social rather than solely individual problems..."⁵

Of course, this story illustrates the dangers of using the powerful adjective 'new.' Despite these dangers, there has been a proliferation of articles and books on the new public health, each offering a slightly different definition and most failing to cite the others.

The two contradictory formulations analyzed above show the way in which public health has come full circle in the search for its identity by rejecting its own past.

What is needed is a formula to integrate the biological and the social, so that successive notions of public health evolve in an ascending spiral, rather than in a circle. This formula is to specify an essential defining criterion for public health that can transcend the changing conceptions of each historical moment. My own contribution to the search for a 'new public health' through my 1993 paper on the subject is precisely an attempt to define the essence of public health.

The development of the National Institute of Public Health and my subsequent work at the World Health Organization, as Executive Director of Evidence and Information for Policy, culminated in my appointment as Minister of Health of Mexico.

I was the first person with formal education in public health to occupy that high office. Having spent the first part of my career working in academic institutions to generate a research basis that could enlighten policy, I suddenly found myself at the other side of this dialogue, trying to mobilize the best available evidence to guide policy formulation, program implementation, and impact evaluation.

Between 2000 and 2006, I had the privilege to lead a health reform that expanded social protection in health to 55 million previously uninsured persons, paving the way for the attainment of universal health coverage. The reform also included a sharp focus on prevention, through the establishment of a dedicated fund for community health services, the deployment of a renewed preventive strategy against chronic diseases, and the creation of a new public health agency—the Federal Commission for Health Risk Protection. The idea was to expand access to health care while at the same time acting on the upstream determinants of health to prevent people from getting sick in the first place.

I moved back to academia in 2009, when I was appointed as dean of the Harvard School of Public Health. My arrival there coincided with the beginnings of a veritable revolution in education.

Just a few years before, while serving as Senior Fellow in the Global Health Program of the Gates Foundation, we launched an international independent Commission on the Education of Health Professionals for the 21st Century, which I was honored to co-chair with my colleague Lincoln Chen. The Commission

published its analysis and recommendations in *The Lancet* in 2010, to mark the centennial of the Flexner Report.6 One hundred years after the birth of the modern era in health professional education, it was high time to examine the transformative reforms needed to face a vastly changed landscape.

The Lancet report was appropriately titled "Health professionals for a new century: transforming education to strengthen health systems in an interdependent world." It reviewed the status of postsecondary professional education in health across the world—especially for medicine, public health, and nursing. It made a call to:

- adopt a global outlook;
- focus on the health needs of populations and the requirements of health systems;
- develop integrated strategies encompassing both instructional and institutional reforms;
- embrace inter- and trans-professional education;
- focus on informative, formative, and transformative learning;
- and take a systems approach to education reform.⁷

In the years following the publication of the *Lancet* report, I had the exhilarating opportunity to implement many of its recommendations through a comprehensive educational reform that is still ongoing at what is now the Harvard T.H. Chan School of Public Health.

The process there also found inspiration in the innovations carried out at other schools of public, as well as the ASPPH initiative "Framing the Future," chaired by Donna Petersen, which presents a new vision for education in public health for the 21st century.⁸

As I have briefly described, the field of public health and my own thinking about it have evolved significantly over the past decades. It could not have been otherwise, since this has been one of the periods of greatest change in history. We are in the midst of a tense and intense health transition unlike anything humankind has experienced before, which is linked to broader demographic, social, and economic transformations.

Today, our world is both more complex and more global. We have been empowered by the success at fighting HIV/AIDS and humbled by the magnitude and scope of persistent problems, from pandemics to the poor performance of health systems.

Many of our biggest challenges remain: preventing disease, promoting healthy environments and lifestyles, delivering high quality care to everyone who needs it, and protecting families from the financial consequences of ill health.

However, I remain fundamentally optimistic about our capacity to face this increasingly complex set of challenges. This is because a new era in public health is being fueled by six simultaneous revolutions:

- First is the revolution in the **life-sciences**, especially in genomics, which is providing better understanding about differential disease patterns in a way that generates solutions suited to specific settings.
- Second is the revolution in **telecommunications**, which is opening exciting new avenues for expanding access to care by underserved populations.
- Third is the revolution in **systems thinking**, which is allowing us to better comprehend complexity and develop integrative approaches to transform reality.
- Fourth is the revolution in **knowledge management**, which is generating evidence to provide a scientific foundation for behavior modification on the part of people, for quality improvement on the part of providers, and for more enlightened decisions on the part of policymakers.

- Fifth is the revolution in **education** that I already alluded to, which is being driven by advances in the cognitive sciences, technological innovations allowing for highly interactive modalities of online learning, an unprecedented expansion in the global demand for higher education, and rapidly changing labor markets requiring continuous learning throughout the entire life cycle.
- Last but certainly not least, there is what Michael Ignatieff has called the **rights** revolution,⁹ which is turning abstract declarations about human rights into concrete entitlements that people can be empowered to demand.

Further progress in public health will depend on our capacity to integrate these five revolutions. A first level of integration must occur across disciplines. Already, the most exciting advances in science are taking place at the intersections of traditional disciplines, as exemplified by genomics, bioinformatics, and health systems research. But we need to go further. There is also a need to integrate across levels of analysis, so that we may examine specific health problems from the genes to the globe. Another domain of integration is between the values of excellence and relevance, which means that while we pursue the highest standards of scientific rigor, we are at the same time providing solutions to the most pressing health challenges of our times.

As we enter a new era of public health education, knowledge will continue to be the key asset to sharpen our understanding of health problems and to create novel solutions. Although punctuated by apparently disparate jobs, my academic and professional journey has been structured around the unifying conviction that knowledge represents the most powerful force for enlightened social transformation. Throughout my career I have traversed the entire circle of knowledge, from its creation through research and its re-creation though education to its translation into evidence as the basis for purposeful and accountable action. Thanks to this comprehensive scope, I have been empowered by my public health education and feel committed to continue to give back by educating the next generations of leaders.

My own trajectory, launched by that profound experience in a poor village in Chiapas, illustrates that public health is at its core an intentional decision to make a difference and a shared commitment to care. We are all part of an uninterrupted chain of commitment whose first links were forged a century ago.

I thank you for the honor you have bestowed on me by selecting me as the 2016 recipient of an award that honors the enduring legacy of the Welch-Rose Report and stimulates all of us to continue building the promising future of our field.

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