

MEDAL –National Institute of Social Sciences 7 December--Final

Mr. Olinger -- my old comrade from the smallpox wars, Larry Altman --
Distinguished guests.

I am deeply appreciative of being a recipient of this medal. During the past century, you have honored an impressive array of creative leaders and architects who have contributed so much to America and the world. I count myself fortunate in having now been selected to be amongst them.

Your recognition of the eradication of smallpox is a departure for this Institute. It salutes a program whose very mission was not creation but destruction – destruction of the disease of smallpox itself. For me, this victory had unexpected personal ramifications. On May 8, 1980, the World Health Assembly announced to the world that smallpox had been eradicated. With some 15 years of experience with smallpox, I had become an international authority on the disease– but, suddenly, there was no smallpox! What, for example, might a cardiologist do if suddenly there was no heart disease? I faced that type of problem. Being left with no marketable skills, I saw no option but to become an academic Dean.

The achievement – the complete elimination of smallpox from the face of the earth in just over 10 years was originally met with disbelief. This disbelief persisted for a number of years after the last case. Some even question me now – insisting that there must be a focus somewhere – deep in Africa or Asia or in the Amazon jungle. There is not. No case has occurred in more than 30 years.

We began the program in 1967. That year there were more than 10 million cases and 2 million deaths in more than 40 countries. Throughout history, it had been mankind's most feared disease. It was a greater concern than plague or malaria or cholera. Over the course of a life time, almost everyone experienced infection. There was no natural protection and no treatment. One in three died and many were blinded. Not surprisingly, it was the only disease for which there were special deities in many cultures. Until 1972 in the U.S., smallpox vaccine was the only vaccine required for school entry. So great was the fear that smallpox might be imported into the country.

The World Health Assembly assigned a target goal of 10 years for the achievement of eradication. The objective was not the product of a careful planning process. Rather, one Assembly delegate pointed out that President Kennedy had predicted that the U.S. would land a man on the moon in 10 years. Why not smallpox eradication as well? As it turned out, we missed that target -- but by just 9 months and 26 days. A disease that had plagued the world for more than 3500 years was gone.

Many had considered the objective to be impossible to achieve. Funds devoted to the effort would only be wasted, so they thought. Thus, our total budget remained at less than \$10 million per year. Our Geneva headquarters staff numbered just 10 persons. We never had more than 150 international staff in the field. There was no Internet, no Facebook, no affordable telephone or telex connections. Communication was largely by mail and an unbelievable travel schedule. Regrettably, there were no Frequent Flyer miles then.

There had never before been a global program requiring active participation of all countries. This was a unique undertaking -- the more so as the program was extant throughout some of the darkest days of the Cold War. However, the Soviet Union joined with the U.S. in becoming a principal supporter; most national leaders were willing and anxious to participate albeit a few were won over only with difficulty. Competent staff willing to work under difficult conditions was critical. Young professionals in their 20s and 30s proved to be best. In all, those from 73 different countries served stints of 3 months to several years. During the last 4 critical years, they were joined by nearly 150,000 local field staff. Our headquarters contingent remained at just 10 persons.

For me, poignant comprehension of the meaning of the program came on August 15, 1975. It was India's traditional Independence Day. Prime Minister Indira Gandhi, addressed the nation each year on this date. She congratulated India on its 28th year of Independence and announced that in India's long written history, this was the first year of its independence from smallpox. She presented a statue to WHO in celebration. It was a magnificent 8 ton bronze statue of

traditional design. As a note, it did not return to Geneva with me as excess baggage.

Many of the remarkable group of people who worked in the program came away with a profound appreciation of what a difference even a few people could make. Indeed, three of them are here tonight – Dr. Larry Altman, my son David, now a sculptor here in New York, and my wife Nana.

During the smallpox campaign years, we had found that, with organization and community support, a team of four vaccinators could immunize 2000 persons per day. Why not add other vaccines already in common use in industrialized countries? Thus, in 1970--3 years into the program -- we proposed to an international meeting that the program be expanded to include polio, measles, and the DPT vaccine (diphtheria, peertussis, and tetanus). We labeled it the Expanded Program on Immunization. That program gradually gained momentum. UNICEF and Rotary International provided important support. This year the Gates Foundation declared the program of global vaccination to have its highest priority. Bill Gates personally committed to providing \$10 billion over the next 10 years.

Today, we are close to the target of eradicating poliomyelitis worldwide. In the whole of the Western Hemisphere, the last cases occurred 20 years ago, and the last cases of naturally occurring measles 10 years ago. Rubella (German measles), -- the cause of hideous malformations in newborns was the latest challenge for the Americas. The last case of that disease occurred some 3 years ago.

Vaccination using increasing numbers of vaccines are being administered world-wide. Some refer to this as the Vaccine Era for preventive medicine. It began with the smallpox program. The outcome has been healthier children and a growing recognition of the importance of women's health, better educated mothers, and smaller families.

It has been an exciting era. Much more is promised. On behalf of the thousands with whom I worked in this grand initiative and a planet which no longer has to fear the greatest of all plagues, many thanks for your recognition.