

CIRO.14

This afternoon we gather to salute a friend—a colleague—a giant in public health. It is fitting that this event be held here at the Sabin Vaccine Institute. It is an Institute whose work reflects the creativity that characterized Ciro's career – mobilization of programs and people in the prevention of infectious diseases through vaccination. And, now, as well, the challenges of the Neglected Tropical Diseases.

Ciro is one of the most inspiring persons with whom I have ever been privileged to work. His achievements in the field of immunization gave public health agendas new visions of achievable goals. He established both models and precedents in creating collaborative programs that extend across communities to entire nations and internationally.

Within an allotted ten minutes, it is possible to summarize for you only a few key developments that, to me, characterize the importance and breadth of his unique contributions. I have known Ciro and his work well since recruiting him from Brazil for a WHO position nearly 45 years ago. I have worked with him as a colleague and friend ever since.

His first assignment was to the Ethiopia smallpox eradication campaign in 1970. There he assumed overall responsibility for field operations and then served there as principal WHO adviser. Ethiopia was one of the most formidable obstacles of all the endemic countries—rivaled only by the much more populous Nigeria and India. Ethiopia then had 30 million residents with few health services, disastrous roads, few communications links, no vaccination program, no reporting system. In size, take the area of Maryland, Pennsylvania, and Virginia combined; multiply that by 4. The program

weathered the assassination of Emperor Haile Selassie, a Marxist revolution, forbidding mountainous terrain, awesome deserts, kidnapping of teams, famine, and floods. Ciro, in his inimical style, melded and motivated an extraordinary group of Ethiopian health officers, Peace Corps from the U.S. and Japan, and WHO advisors from 10 different countries. They were to record more than 68,000 cases and 17 million vaccinations. But in just 6 years they eliminated smallpox from the country. It was the last major barrier to eradication. It was apparent that Ciro possessed extraordinary capabilities to mobilize resources and people and to achieve all but impossible goals under the most difficult of circumstances. It was a hallmark of his career.

From Ethiopia, he went to PAHO in 1977 to assume leadership for the Expanded Program on Immunization. The EPI program represented our efforts to extend and transfer what we had learned in smallpox eradication to a vaccination program that included polio, measles, and diphtheria-pertussis-tetanus vaccines. The program had been approved in 1974 by the World Health Assembly. But the program was making little progress. As in Ethiopia, Ciro galvanized action as he sought to persuade, inspire, and strategize in meetings, personal discussions, through media. He involved national and PAHO staff, potential donors, as well as political figures and entertainers. Vaccine coverage rates across the Americas rose steadily from 20% to more than 90%. Weekly reports of polio cases rose from a few hundred health units to more than 40,000. Surveillance-containment measures, as in the smallpox program, began to be applied. By 1991, polio cases in the entire Western Hemisphere fell to ZERO, measles transmission stopped in 2002, and then rubella and its dread complications of congenital anomalies in 2009. Meanwhile, donors worked together in support and

governments began to cover most expenses. Research programs are in progress and other vaccines are now being included.

Could there have been a more practical demonstration of the potential and power of public health? Governments and health workers had put aside animosities and planned and worked together in programs to benefit hundreds of millions.

Ciro was immensely proud of what had been accomplished but he continued to remind all concerned that they were the ones who had executed the programs. And this was true. The real potential of an international health organization was apparent but the potential and the promise needed a catalyst.

The elimination of polio from the Western Hemisphere was an heroic accomplishment. But Ciro, as always, looked beyond the present and with support from Albert Sabin, Rotary International, and CDC staff, persuaded a timorous world to look beyond the present to a world free of poliomyelitis and measles. Such programs are under way. That they are today foreseen as worthy, achievable goals can be attributed to Ciro's vision and demonstrations of what can be accomplished when countries fully join resources; when national and local leaders – indeed community residents are drawn into full participation.

Yet other challenges are now set before us as Peter has described. The Sabin Vaccine Institute itself represents a conceptual legacy – a creation in which Ciro, the visionary, played a primary role in its founding. With its capable leadership, previously unimagined scenarios are taking form. Ciro's spirit of exploration and creativity live on. My salute to Peter, to Jon Andrus, and to the Sabin Institute.

D.A.Henderson, Nov. 18, 2014