

Footnote to History – a view of the Program

D.A.Henderson

November 1, 2012

After 25 years, I have publicly supported the polio eradication effort for the first time. Why?

The third, and most recent "3 year call to arms" (2010) appeared to me to be no more hopeful than the preceding two all-out efforts. This one set December 31, 2012 as the end of poliovirus circulation in the world. However, a NYTimes article carried the announcement that Bill Gates was giving this program his first priority; the same article referred again to my not infrequent expressed pessimism about a program and a disease problem which has preoccupied me since the time of the Cutter episode in 1955.

A call was received from Ciro de Quadros conveying Gates wish for us to meet for dinner at the Four Seasons restaurant in D.C. Bill Gates, Ciro, a senior Gates advisor, and I discussed the challenges and rationale for 3+ hours. We reached understandings on several issues which, on balance, persuaded me that, whatever my past views on the wisdom of the effort and the character of execution of the polio program, the present facts demanded a reassessment of future plans and expectations. We are dealing with a 24 year-old program, 12 years beyond the target date for completion, with an annual budget several times greater than ever anticipated, with national and international staff who are fatigued, with doubting donors who have been asked again and again to make further emergency donations, but with staff and organizations who have committed themselves and their respective organizations to achieving the ultimate goal of polio eradication. A collapse of the program and a renouncement of the eradication goal has a potential for serious repercussions with respect to sustaining the successful and strengthening International Expanded Program on Immunization and potentially on WHO and other organizations such as Rotary who have staunchly stood with the program

Important new factors that contribute to the probability of a successful outcome are, first, the personal commitment of Bill Gates himself as a primary force to visit affected areas, to meet with heads of state, Ministers, staff, etc. and to convey his personal convictions and degree of concern. Previous special efforts attracted prominent interest and leaders but on the dedicated scale that Gates intends. 2) An Independent Monitoring Board of distinguished leaders has been established which meets every 3 months, reviews in depth overall progress and problems in the endemic and neighboring countries. The reports are distributed directly, unfiltered by sensitive organizations or bureaucracies. Indeed, the reports to date have been tough, incisive, and constructive. Since their establishment, they have forced serious rethinking of plans, personnel, and programs with what appear to be significant results.

I expressed my concern about a possible change in definition of the original objective from eradication of wild poliovirus transmission and cases to one embracing all polio vaccine derived viruses VDPVs and associated cases. With heroic efforts such as are now under way, I believe

[Type text]

that the continuing transmission of wild polioviruses is possible. It is an effort that will continue to involve many times the amount of money and effort that has been previously available. It will be a difficult task and will involve a number of years of diligent effort and considerably more funds than working budgets have yet forecast.

Were the objective to shift to eradication of all VDPVs, I believe the program would have to be deemed a failure and rapidly and deliberately altered to an affordable control program operating fully within the existing EPI structure and management. We now know that there are uniquely immune-compromised individuals who, after vaccination can excrete the viruses for months and years (more than 25 years in one instance); we know that current vaccine strains can recombine with Coxsackie group strains so as to result in outbreaks of paralytic disease indistinguishable from wild poliovirus. We know that at this time, there is no realistic likelihood that an inactivated vaccine can be produced that would not require syringe and needle application; that would be affordable for a global program; and would confer intestinal immunity sufficient to significantly impede further spread of paralytogenic strains.

The one small window of hope is that further and more detailed epidemiological and virological study would confirm the possibility of an affordable long-term program using OPV to ultimately confirm the eradication of the wild poliovirus strains. Expert Advisory Groups assert that this possible use of OPV is simply not possible. However, it is difficult at this time for me to discern the likelihood of such an option given the long, past history of the polio eradication committees to welcome questioning or dissenting participation.