



## The polio eradication campaign: time to shift the goal

Emmanuel Baron<sup>a</sup> and Claire Magone<sup>b,\*</sup>

<sup>a</sup>Epicentre, 8 Rue Saint-Sabin, 75011 Paris, France; <sup>b</sup>Médecins Sans Frontières, 8 Rue Saint-Sabin, 75011 Paris, France.

\*Corresponding author: Tel.: +33 1 40 21 27 85; E-mail: Claire.MAGONE@paris.msf.org

Received 17 December 2013; revised 23 December 2013; accepted 23 December 2013

The social rejection of the polio eradication campaign in endemic countries challenges an assumption underlying the goal itself: the full compliance of an entire population to a public health programme. The polio campaign, which has been an extraordinary public health enterprise, is at risk of becoming irremediably unpopular if the eradication goal is pursued at all costs. The Global Polio Eradication Initiative (GPEI) should not be driven by the fear of failure, because the greatest benefit of the polio campaign is that it has demonstrated how simple, community-wide actions can contribute to a dramatic decrease in the incidence of a disease.

**Keywords:** Polio, Polio eradication campaign, Poliomyelitis

Last seen almost fifteen years ago, the resurgence of polio in Syria comes as no surprise in a context of war where sanitary conditions have deteriorated substantially and routine vaccination programmes are extremely disturbed. This is yet more bad news for the Global Polio Eradication Initiative (GPEI), a public-private partnership whose goal is to eradicate poliomyelitis. In 2013 cases have also been reported in several other countries such as Somalia, Cameroon, Israel and Egypt while the disease remains endemic in Afghanistan, Pakistan and Nigeria.

And the outlook is even grimmer as the latest report by the GPEI's Independent Monitoring Board (IMB) acknowledges there are 'outbreaks waiting to happen' in Yemen, Central African Republic, Ukraine, Uganda, Lebanon, South Sudan and Sudan, Iraq, Mali, Djibouti and Eritrea.<sup>1</sup>

One of the major challenges identified by the GPEI is the need to overcome people's rejection of polio vaccinations, particularly in endemic countries affected by open conflict. In addition to the refusal of parents and bans by official governments (Nigeria, 2003), tribal elders and opposition groups (Pakistan 2012), there is a new phenomenon directly affecting the campaign. In 2013, over 26 polio workers were murdered in Pakistan and 10 in Nigeria. In response, the IMB report recommends, 'that all means be used to ensure that the polio programme in every country is known to be neutral'. This recommendation is based on a seemingly self-evident assumption that the programme for polio eradication is neutral by its very nature. But in reality, far from being neutral, the push for worldwide eradication of polio is a political undertaking not without its own implications that call for critical observation.

Often portrayed as the mirror of obscurantism of local groups or authorities exploiting people's ignorance and gullibility, the reasons behind the resistance to polio vaccination in Nigeria and Pakistan are much more complex. People's resistance is

rooted in repeated and intrusive vaccination campaigns targeting marginalised populations living in poor sanitary conditions. In those settings, scepticism about vaccine utility and efficacy is fuelled by the frequent administering of a high number of doses of polio vaccine<sup>2,3</sup> and by the fact that some children affected by paralytic polio are known in the community to have sometimes received several doses.<sup>4,5</sup> The refusal of parents in such areas is an expression of their doubts regarding vaccine efficacy and utility, and frustration or suspicion of a programme aimed solely at eliminating a disease not viewed as a health priority.

In situations of conflict between insurgent movements and governments, the more effort official authorities deploy to vaccinate all children, the more political groups exploit this to their advantage to demonstrate their power to influence positively or negatively the goal of eradication, in the full knowledge that, whatever their stance, they are sure to receive extensive media coverage. In the north of Waziristan in 2012, for example, the Taliban declared a ban on polio immunisation, stating that the boycott would be lifted when the USA stopped using drones. Elders then joined the boycott, putting pressure on the government to meet their demands for electrification in exchange for implementing a vaccination campaign.

The governments of Nigeria and Pakistan reacted vigorously to what they saw as a threat to their credibility. They declared total war not only on polio, but also on the enemies of polio immunisation; over 100 families were recently arrested in northern Nigeria and jailed for missing polio vaccinations and several journalists were prosecuted for inciting murder and disorder after broadcasting a radio programme criticising the eradication campaign. In Pakistan, vaccination programmes are now implemented under military escort, sometimes at dawn to take villagers by surprise. And, far from questioning the limits of pushing polio

eradication at any price, the murder of polio workers is described as ‘tremendous sacrifices’.<sup>6</sup>

The polio eradication campaign has shown what the mobilisation of financial flows and science along with that of millions of community workers and highly effective health engineering can achieve, as witnessed by the spectacular decrease in the number of cases of polio which dropped from 350 000 a year in 1988 to just a few hundred at the beginning of the previous decade (2000). But the difficulties encountered by the Initiative in obtaining the support of some populations on the final mile to eradication also challenge one assumption behind the goal of eradication itself: the capacity to fully control people’s behaviour and attitudes towards public health interventions. Operational successes on which prospects for polio eradication were built (such as the eradication of smallpox and the elimination of polio in developed countries) cannot be simply copied and pasted in different socio-political contexts.

The proponents of the programme have until now refused to acknowledge this reality, because they are prisoners of a binary vision, as summarised by Bill Gates, one of its major funders: ‘Eradications are special (. . .). You either do what it takes to get to zero and you’re glad you did it; or you get close, give up and it goes back to where it was before, in which case you wasted all that credibility, activity, money that could have been applied to other things.’<sup>7</sup>

What has been an outstanding public health enterprise is at risk of becoming irremediably unpopular if the GPEI and its partners refuse to consider any other option than finishing the job, whatever the cost. But the greatest benefit of the polio eradication experiment is that it has demonstrated how simple, community-wide actions can contribute to a dramatic decrease in the incidence of a disease. It is urgent that such a successful combination be used as a model to substantially increase routine immunisation in those places where still too many children die of preventable diseases and to reduce infant mortality where it remains at unacceptable levels.

**Authors’ contributions:** EB and CM conceived the article, researched the data, discussed the content and drafted the manuscript. Both authors read and approved the final manuscript. CM is guarantor of the paper.

**Funding:** None.

**Competing interests:** None declared.

**Ethical approval:** Not required.

---

## References

- 1 Independent Monitoring Board of the Global Polio Eradication Initiative: Eighth Report - October 2013. [http://www.polioeradication.org/Portals/0/Document/Aboutus/Governance/IMB/9IMBMeeting/9IMB\\_Report\\_EN.pdf](http://www.polioeradication.org/Portals/0/Document/Aboutus/Governance/IMB/9IMBMeeting/9IMB_Report_EN.pdf) [accessed 10 December 2013].
- 2 Nigeria: ‘We Will Not Submit Our Children for Vaccination’ – Emir of Kazaure Weekly Trust (Abuja), July 2003. <http://allafrica.com/stories/200311100441.html> [accessed 10 December 2013].
- 3 Hussain RS, McGarvey ST, Shahab T, Fruzzetti LM. Fatigue and fear with shifting polio eradication strategies in India: a study of social resistance to vaccination. *PLoS ONE* 7(9): e46274. doi:10.1371/journal.pone.0046274.
- 4 Bhutta ZA. The last mile in polio eradication. *Lancet* 2011;378:549–52.
- 5 Khowaja AR, Khan SA, Nizam N et al. Parental perceptions surrounding polio and self-reported non-participation in polio supplementary immunization activities in Karachi, Pakistan: a mixed methods study. *Bull World Health Organ* 2012;90:822–30. doi:10.2471/BLT.12.106260.
- 6 Global Polio Eradication Initiative. News Stories 2013: Looking back on 2012. <http://www.polioeradication.org/Mediareom/Newsstories/Newsstories2013/tabid/488/iid/267/Default.aspx#sthash.5SpG9huH.dpuf> [accessed 10 December 2013].
- 7 Waters R. An exclusive interview with Bill Gates. *Financial Times*; 2013. <http://www.ft.com/intl/cms/s/2/dacd1f84-41bf-11e3-b064-00144feabdc0.html#axzz2n0ECP2yY> [accessed 10 December 2013].