The global politics of polio eradication

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The Global Polio Eradication Initiative (GPEI) is widely recognized as an extraordinary humanitarian enterprise, made possible in part by its political neutrality. It is undoubtedly true that the GPEI's successes to date are due in large part to the efforts of many laudably idealistic members of the global health community, dedicated to the goal of eradicating polio from the entire world. But when the program has encountered actors who do not share this goal, progress has necessitated a negotiation of interests – that is, it has required engaging in politics. This chapter explores these processes as a window into the workings of global health generally, and as a guide to those who seek to pursue such idealistic goals in the future.

Introduction: the political origins of polio eradication

In 1988, the World Health Assembly (WHA) resolved to eradicate polio globally by the year 2000. Health and humanitarian ideals aside, this resolution was a significant political milestone, since it required many countries – each with different national priorities – to collectively fight a single disease. In theory, the member countries of the World Health Organization (WHO) would deliberate carefully about which disease was most suitable for eradication, taking into account such factors as global burden of disease or case fatality rate. In reality, although the member countries' votes are necessary to move a resolution forward, the real genesis of polio eradication was a series of smaller events that built towards the global project, and which provide valuable insights into the politics of global health.

Rather than agreeing to eradicate polio in an international forum, the decision was mainly driven by a relatively small cadre of doctors and epidemiologists who believed that eradication was a global good, despite the prevailing preference for Primary Health Care over disease-specific vertical programmes. Following the successful eradication of smallpox, these 'true believers' organised a series of conferences with the objective of identifying the next disease they would eradicate. Remarkably, the speakers at these events offered little support for eradication – smallpox veteran D.A. Henderson himself came out strongly against it, believing smallpox had been eradicated largely by luck – yet in the sidelines eradication proponents encouraged each other, and gradually narrowed their list of target diseases, from which polio emerged as a frontrunner (Muraskin, 2012).

These advocates had a variety of motivations for supporting the principle of eradication. Albert Sabin, for example, believed passionately in the potential of his live-attenuated oral polio vaccine (OPV), and wanted to see it used as widely as possible. He advocated for mass vaccination campaigns that successfully eliminated polio in the Dominican Republic, Cuba, and Brazil (though he was expelled from the latter initiative for

publicly criticising the Brazilian government, which had hoped polio elimination would improve its public image (Hampton, 2009)). The successes in these countries set the stage for Ciro de Quadros (a Brazilian epidemiologist) to convince the Pan American Health Organization (PAHO) to undertake a project of regional polio elimination throughout the Americas in 1985 (Brookes and Khan, 2007).

De Quadros saw polio as a 'banner disease' that could rally support for broader immunisation programmes (de Quadros, 2008, p. 61, cited by Muraskin, 2012), a view shared by the newly elected PAHO director (and fellow Brazilian) Carlyle Guerra de Macedo. They received financial support for their regional elimination project from Rotary International, which was hoping to unite its international membership in an idealistic cause (Muraskin, 2012).

For Rotary leadership, as for many other eradication advocates along the way, polio's appeal lay not only in its idealism, but also in its high level of public visibility. In the twentieth century, polio was a particularly high priority in the United States. President Franklin D. Roosevelt, who was disabled by polio, helped make the 'March of Dimes' the largest medical charity in history (Barrett, 2008), supporting research that ultimately produced both the inactivated polio vaccine (IPV) and the oral polio vaccine (OPV). These vaccines made eradication technically conceivable, and (as noted earlier) OPV developer Albert Sabin was instrumental in agitating for elimination programmes early on. Polio's notoriety also made it ideal as a 'banner disease' for people like de Quadros, who successfully used this argument to win over Jim Grant, then Executive Director of UNICEF (Closser, 2010, p. 37). Yet in many ways, polio remained an unlikely candidate for global eradication: it caused relatively few deaths worldwide, and many argued that the resources required for eradication would be better spent on less ambitious programmes to control more deadly diseases (Muraskin, 2012).

The notion of scaling-up from PAHO's regional elimination project to a global polio eradication programme was seeded, quite unexpectedly, in the midst of a busy meeting of the Task Force for Child Survival in Talloires, France in 1988. UNICEF's Jim Grant and smallpox eradication veteran Bill Foege handed around drafts of a so-called 'Declaration of Talloires', proposing to eradicate polio, neonatal tetanus, and measles. The Talloires meeting was only supposed to decide the Task Force's agenda for the 1990s, but it proved a highly effective venue for promoting the eradication idea: by Ciro de Quadros' reckoning, most of the world's population was represented by the Ministers of Health in attendance, along with the president of the World Bank and many other influential figures in global health. Yet the person whom Foege and Grant most needed to convince was D.A. Henderson, who, as the acting rapporteur, was the ultimate gatekeeper as to how the Declaration was portrayed in the meeting report (Muraskin, 2012; Brooks and Khan, 2007; The Task Force for Child Survival, 1988).

Henderson, already a noted eradication sceptic, found their proposal unrealistic. Meeting privately with Grant and Foege, he exhorted them 'not [to] make fools of ourselves' (Muraskin, 2012, p. 49) by publicly proposing to globally eradicate tetanus, whose spores could not be removed from the soil, and measles, which had never been interrupted even in the United States. Grant and Foege relented on both counts, but they would not be dissuaded from polio. Grudgingly, Henderson agreed to include this revised 'Declaration of Talloires' in the meeting report. This document was then strategically deployed to mobilise support for the official WHA resolution to eradicate polio, which passed with unanimous support just a few months after Talloires (Muraskin, 2012). In this way, a relatively small group of people managed to put polio on the global agenda.

In its final wording, the WHA resolution stated that '... eradication efforts should be pursued in ways which strengthen the development of the Expanded Programme on Immunization as a whole, fostering its contribution, in turn, to the development of the health infrastructure and of primary health care' (WHA, 1988, p. 1). This helped to justify the programme in poorer countries where basic health services were a higher priority than an idealistic enterprise like polio eradication: the resources rallied around the eradication goal would, along the way, help build up basic health services such as routine immunisation (RI). With this, the resolution passed, and the GPEI was created. But, despite an international agreement being forged, the process of convincing the world to eradicate polio had only just begun. As we shall see, executing a global goal still depends on the commitment of individual countries and, ultimately, that of their people.

Latin America

Polio's earliest experiences in overcoming countries' internal divisions come from Latin America, where the first large-scale polio vaccination campaigns were conducted under the aegis of PAHO's regional polio elimination programme. Most challenging of all were those settings in which violent conflict threatened to interfere in vaccination activities.

In the 1980s Salvadorian Civil War, for example, there was a substantial risk of vaccination teams being caught in the crossfire between the government and guerrilla fighters. In El Salvador, PAHO collaborated with UNICEF, the Red Cross, and the Catholic Church to organise one-day truces, dubbed 'days of tranquillity', through a lengthy process of briefing guerrilla representatives in faraway Washington, DC on why collaboration was needed to be able to deliver the vaccines. The representatives then relayed the message to field commanders, who determined whether a truce was agreeable:

During the actual immunisation days, around 20 000 people – health workers, volunteers, and members of guerrilla forces – gave the vaccinations. On one occasion, one of the PAHO epidemiologists who was leading a team of vaccinators was returning from the field at the end of the day and was stopped by a group of guerrilla fighters. Initially, he was terrified, but then he realised that the guerrilla fighters wanted the team to return to a village that was left without vaccination!

Eventually, 3 days of tranquillity were held every year from 1985 to 1991 for vaccination of practically every child in El Salvador, until peace was achieved in the early 1990s. It is difficult to measure the contribution of polio eradication to the final achievement of peace in that region, but, undoubtedly, the collaboration among all those working in health helped to raise the level of trust among people.

de Quadros and Epstein, 2002, p. 26

Processes like this were part of PAHO's 'Health as a Bridge for Peace' plan, which sought to capitalise on the universal value of good health, to negotiate Days of Tranquillity and successfully arrange for polio eradicators to operate despite conflicts in Sri Lanka, the Philippines, Afghanistan, Tajikistan, Sudan, and DR Congo (Mach, 1999).

PAHO faced a different situation in Peru, where *Sendero Luminoso* (Shining Path) guerrilla insurgents lacked the command structure that had facilitated negotiation in El Salvador:

The only option was to try to inform everybody, through the mass media, that the [recently diagnosed] case in Junin could be the last case of polio in the western hemisphere and that only with the cooperation of every individual in the country could the outbreak represented by this boy be contained. This approach had a certain amount of risk, because the Shining Path could have used this opportunity to disrupt the operation as a show of power. Press conferences were held and appeals were made to every member of society to participate and cooperate with the mop-up vaccination campaign.

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No disruption occurred in the ensuing campaign. By saturating the public with messages emphasising the imminence of eradication, eradicators seemingly captured enough popular support that Sendero Luminoso could not benefit politically from interfering. Thus, humanitarian neutrality has, at times, allowed polio to forge some improbable partnerships.

Nigeria

Eradicators faced a tougher challenge in July 2003 in Nigeria, where internal political divisions fuelled a boycott of polio vaccination by five Northern states. While other states only held short boycotts, Kano state

persisted for 11 months, with Governor Ibrahim Shekarau apparently blocking the national eradication agenda as a show of defiance to President Obasanjo. Obasanjo was a Southern Christian who had recently won re-election, defeating a candidate who was close to Shekarau, and popular in Nigeria's predominantly Muslim North. In the wake of this defeat, Shekarau sought to consolidate his political base by appealing to his constituents' identity, and promoted a rumour that OPV was a Western conspiracy, abetted by the Christian president, to kill and sterilise Muslims (Ghinai, et al., 2013; Jegede, 2007; Obadare, 2005).

Several factors may have exacerbated this rumour. First, the free provision of OPV in Kano may have appeared suspicious to people with few health services and more serious diseases, and biomedicine's historical association with colonialism redoubled those suspicions. Moreover, the post-9/11 conflicts in Iraq and Afghanistan had heightened perceptions that the West was at war with Muslims, and the memory of recent deaths during Pfizer's Nigerian trials of its anti-meningitis drug, Trovan, heightened the plausibility of Western medicines killing children, even though the deaths were found to be unrelated to the trial (Ghinai, et al., 2013).

Through religious networks, the polio programme sought to dispel anti-vaccination rumours. The Organisation of the Islamic Conference approved a resolution in October 2003 urging member countries to hasten eradication, and also helped GPEI secure pro-vaccination *fatwas* from the Islamic Fiqh Academy (Kaufmann and Feldbaum, 2009). GPEI had been cultivating ties with these groups since before the boy-cott, following the recognition that its Western links could be a liability. Internationally, this rebranding took the form of international agreements. At the local level, it meant connecting health workers with local *imams* to relay health messages through their mosques – the idea being to dispel arguments that polio vaccination was contrary to Islam, so as to clear the path for a solution through diplomatic channels.

Ibrahim Gambari, the UN Secretary-General's senior advisor for African affairs, was the GPEI's chief diplomat in the efforts to end the persisting boycott in Kano State. As the child of a Northern Muslim father and a Southern mother, Gambari was a political bridge – in President Obasanjo's words, 'You get to where I find it difficult to get to' (Kaufmann and Feldbaum, 2009, p. 1094).Yet Gambari was unable to win the Governor over. 'You are going to condemn a whole people to this life of misery', Gambari said to the Governor, before he left Kano, 'at least consider you may be wrong' (Kaufmann and Feldbaum, 2009, p. 1094). Nonetheless, his work opened a dialogue with the North, conveying that the boycott would not only harm children's health, but also damage Nigeria's (and Kano's) international reputation.

The government of the United States (the chief GPEI donor at the time) incorporated the polio issue into official visits to Nigeria by the Health and Human Services secretary and deputy-secretary, raising it in Secretary of State Colin Powell's meeting with his Nigerian counterpart, and sending further emissaries through the African Union and regional diplomats (Kaufmann and Feldbaum, 2009). These routes of influence targeted the central government, which was unable to overrule Shekarau outright, but still had means to push him towards capitulation.

While applying these different forms of pressure and persuasion, the Programme and its partners simultaneously created ways for Shekarau to back out of his boycott while avoiding embarrassment. For example, UNICEF sourced new OPV stocks from Indonesia, allowing Shekarau to justify his capitulation by saying the vaccines could be trusted if manufactured in a Muslim country (despite the fact that the Indonesian vaccine had already been used in Nigeria before the boycott) (Kaufinann and Feldbaum, 2009). The Indonesian factory was opened for inspection by the Nigerian government, and, when the Kano authorities were still not satisfied, a second delegation was sent from the Kano state government.

Shekarau's capitulation was fumbled, according to WikiLeaks cables allegedly penned by US Ambassador John Campbell: the Governor planned to announce resumed polio activities on 14 June 2004 (Campbell, 2004b), but balked when his decision was prematurely revealed by Dere Awosika, the leader of the National Programme on Immunisation (NPI). Campbell allegedly proposed devolving the NPI to state governments, removing Awosika from the picture and allowing Shekarau to resume vaccination on his own authority, without appearing to give in to the federal government. At this stage, '... public pressure on either the GON [Government of Nigeria] or the Kano state governor could prove counterproductive ... the Nigerian aversion to public criticism and arm-twisting could be strengthened, delaying implementation even further' (Campbell, 2004a). Vaccination in Kano finally did resume in August 2004, but serious damage had been done: the boycott was estimated to have quintupled polio incidence in Nigeria between 2002–6, seeded polio outbreaks across three continents, and cost over US\$500 million to contain (Ghinai, et al., 2013).

In the decade following the boycott, Nigeria gradually brought polio cases back to pre-boycott levels, and in September 2015 Nigeria was officially removed from the list of polio-endemic countries (National Primary Health Care Development Agency, 2015). Celebration of this milestone was short-lived, however, as in August 2016 two children were discovered paralysed by wild poliovirus in Borno state, indicating that the disease still lingered in the North, where population movements and violent conflict hinder vaccination and surveillance activities (WHO, 2016). By the end of 2016 four cases of wild polio virus were confirmed in Nigeria and it was returned to the list of endemic countries along with Pakistan and Afghanistan.

Pakistan

Pakistan has seen some of the most extreme opposition to polio eradication, including outright violence. One Saturday in December 2013, two masked men stormed an immunisation office in Khyber, ordered women and children out of the building, then fatally shot polio campaign supervisor Ghilaf Khan and escaped on motorcycles, leaving behind a one-sentence note: 'Those who follow foreigners will meet the same fate' (Afridi, 2013, n.p.).

This conforms to the rhetoric of anti-state militants in Pakistan, who oppose any symbol of compliance with Western interests. As of September 2016, attacks like this had killed 41 people, and injured an additional 40, including polio workers as well as police assigned for their protection (Yusufzai, 2016). Facing violence and poor pay, health workers and teachers refused to work on polio campaigns in Khyber and Peshawar (AFP, 2014; *The Express Tribune*, 2014a; Dawn, 2014; *The Express Tribune*, 2014b).

Around the same time as the killing of Ghilaf Khan, polio cases started appearing in North Waziristan (Firdous, 2013; IMB, 2013), where militant leader Hafiz Gul Bahadur had banned polio vaccination the previous year:

Dated: 15/06/2012

In the name of Allah!

Shura of Mujahideen's Administrator Hafiz Gul Bahadur has taken this decision in consultation with his shura that unless the series of drone attacks are stopped, there will be a ban on the administration of polio drops. Because what is the use of the well wishes of such a well-wisher who on one hand, spends billions on the administration of drops for the protection against polio disease, and polio happens to one in hundred thousand, on the other hand the same well-wisher (USA) with the help from his servant (Pakistan) is conducting relentless drone attacks [...] Also in the polio campaigns there are strong chances of spying over the Mujahideen by the US and an example of which is Dr. Shakil Afridi...

RUSI, 2014, p. 1

With vaccinators under fire, and Waziristan rapidly becoming a polio reservoir, the International Monitoring Board of the Global Polio Eradication Initiative (IMB) urged that 'all means be used to ensure that the polio programme in every country is known to be politically neutral' (IMB, 2013, pp. 58–9), adding, 'The goal of eradicating polio from the world should be an apolitical, humanitarian endeavor' (IMB, 2013, p. 43).

The CIA received considerable blame for politicising health programmes after it was revealed that the agency had employed Dr. Shakil Afridi to stage a fake hepatitis B vaccination campaign, in an attempt to

locate Osama Bin Laden (Shah, 2011). The incident was denounced for undermining trust in polio vaccination teams and humanitarian workers worldwide (Roberts and VanRooyen, 2013; *The Lancet*, 2014; Buekens, et al., 2013).

However, it is an over-simplification to blame the CIA for the violence and bans against vaccinators in Pakistan. First, violence towards vaccinators preceded the CIA-Afridi incident. During the 2006–9 occupation of Swat, for example, Tehreek-e-Taliban Pakistan (TTP) leader Mullah Fazlullah prohibited polio vaccination and issued *fatwas* condemning lady health workers (LHWs) as prostitutes and servants of America, and exhorted Muslim men to kidnap, forcibly marry, or kill them if they came knocking (Ud Din, et al., 2012). As in Nigeria, Fazlullah saw polio vaccination as 'a conspiracy of the Jews and Christians to stunt the population growth of Muslims' by sterilising their children (Yusufzai, 2007, n.p.). The CIA incident may have reinforced these attitudes, but it did not create them (Roberts, 2013).

Second, militants in Pakistan should not be presumed to operate as a unified front. The fragmentary groups that fall under the umbrella of the TTP generally consider themselves to be at war with the Pakistani state, which they see as a puppet of the West. The groups in North Waziristan, in contrast, exist primarily as bases of operation for Taliban fighters in Afghanistan, and it is an open secret that they receive covert support from the Pakistani military (who consider these groups to be useful agents for influencing events across the border in Afghanistan).

Polio eradicators have therefore faced very different challenges with respect to the Waziristan ban and the targeted attacks by TTP groups. The attacks appear to be opportunistic strikes against the Pakistani government and the West – the groups behind them make no demands, claim no responsibility, and their only apparent goal is to undermine the government, leaving no basis for negotiation. The ban, by contrast, lays out clear demands, and bears the signature of the leader sponsoring it, who has a longstanding relationship with the Pakistani military (International Crisis Group, 2015). What the ban and the attacks have in common is that the gatekeepers do not value polio eradication, and are willing to compromise it to pursue other ends – mainly to express grievances to the government and to send a broader ideological message to the world at large.

This is in contrast with Afghanistan, where eradicators have successfully negotiated with the Taliban to get access for vaccinators. The organisational hierarchy of the Taliban allowed the polio programme to overrule local opposition through a high-level agreement with Taliban leader Mullah Omar, facilitated by the International Committee of the Red Cross. Omar signed a letter of protection, which vaccination teams used to gain access in areas under Taliban control (Crossley, 2013; Trofimov, 2010). So, the Afghan and Pakistani groups differ: '... whereas the Taliban in Pakistan is a militant group that is dependent upon a show of power to maintain their control over a small geographical area, the Taliban in Afghanistan is potentially the government-in-waiting' (Abimbola, et al., 2013, p. 1).

The Taliban have a sense of stewardship in Afghanistan, and a responsibility to provide public services to communities under their control. This illustrates how, in any given country, there are often multiple centres of power that operate in parallel to (or in opposition to) the traditional civilian government that is recognised by the international community. These informal authorities – beneficent civil society groups, freedom fighters, fragmentary armed mafias, and many others in between – can exert great influence in facilitating or disrupting a global initiative like polio eradication, despite lacking a seat at the WHA.

But all political powers, formal and informal alike, depend to some extent on the will of the people who live under their regime – leaders who fail to satisfy the public are at risk of being voted out of office, or being supplanted by a rival faction. This, in general, is a great advantage for global health programmes, which can offer something that is of great value to nearly every human being: a longer and healthier life. These benefits are so universally valuable at the grassroots level, that even the most indifferent leaders can sometimes be persuaded to acquiesce to a health programme's requests, especially when it costs these leaders little and they are still able to claim credit for the benefits given to their constituents.

Yet the polio programme has often struggled to gain grassroots support. Particularly in Pakistan and Nigeria (and in contrast to Latin America), as polio became far less visible it was seen as far less important

than other local needs, especially in communities where basic public services are crumbling. Sometimes such communities have bargained for services or infrastructure (e.g., a borehole for drinking water) by strategically refusing polio vaccinators entry (Taylor, 2014; Closser, Jooma, et al., 2016; Closser, Rosenthal, et al., 2016).

The GPEI therefore adopted a strategy in Pakistan, used in India and Nigeria a decade earlier, of accompanying polio vaccination drives with other health services that addressed the felt needs of the community. For example, the *Sehat ka Insaf* (Justice for Health) model, in Peshawar, Pakistan, folded polio vaccination in amongst vitamin A drops, hygiene supplies, and vaccines for tuberculosis, diphtheria, pertussis, tetanus, hepatitis B, haemophilus influenza, pneumonia, and measles (Yusufzai, 2014). Particularly in Pakistan, with its security threats, de-centring polio from being a highly visible campaign may make it a less attractive target for attackers, since its symbolism of Western interests is defused by the fact it is providing services that many people value.

Pakistani expert Zulfiqar Bhutta has, moreover, proposed that 'Polio eradication hinges on child health in Pakistan', on the basis that providing basic health services is the most genuine and direct way to win community trust for polio eradication (Bhutta, 2014, p. 285). In a way, this turns the original promise of polio eradication on its head: basic health services, once supposed to follow on the GPEI's coat-tails, now appear crucial to achieving eradication itself.

Polio eradication endgame and legacy

Another political challenge facing the GPEI is polio eradication's endgame and legacy. The endgame strategy requires sustained political commitment – even after the last case of polio is identified – in order to maintain polio surveillance and immunisation activities, and eventually to certify the success of global polio eradication.

At the core of this plan is the fundamental need to close the book on polio, which has become a symbolic flag-bearer for global health writ large. Its success or failure is expected to have implications for future disease eradication efforts, global health institutions, the people who work within them, and the ideals which motivate them. Success would be the ultimate show of strength, demonstrating the capacity of the partner organisations, validating the vast investments made, and giving a much-needed injection of confidence. Indeed, polio eradication is one of the most expensive global health projects in history, with 2016 costs totalling nearly US\$1 billion – supplied by an array of donors led by the Bill & Melinda Gates Foundation, the US government, Rotary International, and many other country governments and private philanthropists (WHO, 2017). Failure could discourage future investment in such initiatives and undermine the very idea of eradication.

In addition to epidemiological, financial, managerial, and many other factors, maintaining political commitment to eradication at all levels is critical. As seen in the example of Nigeria, countries must be prepared to mount a strong and rapid response in the case of outbreaks, even after being certified polio-free. An unexpected resurgence of the disease after eradication is certified would undermine the credibility of the polio programme. It is therefore necessary to prepare politicians and the public to celebrate certification without letting surveillance and containment falter.

Each step towards global eradication raises the risk of the programme being held hostage by actors who seek to use the global commitment to eradication as an opportunity to leverage other local political ends. At the same time, successful eradication creates the possibility of polio bioterrorism – though it is not considered a likely bioterrorism agent (CDC, 2017), being neither as deadly or fearsome as other pathogens that might be used in this way. Nevertheless, the un-eradication of a disease would deal a serious blow to global health institutions and public and political confidence in them.

The legacy of polio eradication will also reflect upon the outcome of the promise, made in 1988, that polio eradication would contribute to health systems strengthening, and thereby benefit low-income countries which otherwise might not have considered polio eradication to be in their national interest. If

this promise goes unfulfilled, it may undermine future efforts at disease eradication, as well as other public health endeavours requiring global commitment to a shared goal.

To some extent it is already possible to estimate the GPEI's impact on national health systems. It is widely agreed, for example, that the surveillance system set up for polio eradication greatly benefitted Nigeria's response to the 2014 Ebola outbreak (IMB, 2014), however, more systematic analyses are necessary for understanding how widespread and sustainable the polio programme's contribution is.

One large mixed-methods analysis (Closser, et al., 2014), focusing on Africa and South Asia, found little quantitative evidence that polio eradication activities were associated with improvements in routine immunisation (as measured through DTP3 coverage). Their qualitative analysis found that polio eradicators had made contributions to national health systems, but these were often built in parallel to routine health programmes, rather than within them. For example, countries had improved disease surveillance systems, but often these were reserved for polio while other diseases were monitored using older, weaker systems; polio vaccinators had created unprecedented maps of marginalised communities, but these were rarely used to deliver any services other than polio vaccination. Cold chain systems stood out as the only significant improvement that was consistently integrated into the wider health system. The greatest improvements, the authors noted, were found in countries which already had relatively strong health systems to begin with.

A more recent set of analyses, focused on seven African countries, found more encouraging evidence that polio surveillance systems were repurposed for priority diseases like measles, yellow fever, cholera, and anthrax (Mwengee, et al., 2016). They noted an increase in routine immunisation coverage in the years since polio activities began, but did not assess whether this was directly attributable to GPEI support, nor whether this was likely to be sustained after eradication. Likewise, they observed that GPEI-funded personnel and resources had been used to benefit other health services, but identified no plans for sustaining these once GPEI funding lapsed (Anya, et al., 2016; Gumede, et al., 2016).

It remains to be seen whether gains beyond polio will be sustained when GPEI funding ends and the networks of international advocacy for polio eradication are relaxed. A study in ten African and South Asian countries found that polio-funded staff were supporting surveillance and routine immunisation, and many expected routine immunisation coverage to suffer if this support disappeared, noting, 'The disparity in pay between polio workers and other health workers also indicates that there is not a clear path to transitioning human resources from the polio eradication effort to other responsibilities' (GPEI, 2015, p. 36). According to this view, the apparent strengthening of health systems is dependent on GPEI's financial support, or at least the equivalent sustained support beyond polio-specific efforts. Only when this support is withdrawn will we know how real and sustained the promised 'value-added' system strengthening of the polio eradication effort turns out to be.

Conclusion

Polio eradication began with an agreement, made at the most elite levels of international health diplomacy. In this chapter, we tracked this commitment from the halls of power in which it was forged to the local pathways to implementation trod by volunteers and community leaders working to bring the commitment to fruition. We highlight three conclusions that can be drawn from this discussion.

First, the common saying, 'all politics is local', is just as applicable to global health as to any other sphere of politics. Even with an international coalition backing their effort, eradicators have frequently had no choice but to sit down at the negotiation table with the local gatekeepers – priests, politicians, militants, and revolutionaries – to engage their local support in order to achieve the global eradication goal. These negotiations succeeded in many instances because the gatekeepers themselves appreciated the value of health to their communities and followers, and realised that support for the programme could win them praise.

Second, eradication is a high-payoff, high-risk strategy of communicable disease control. In particular, it is a strategy vulnerable to being held hostage by local leaders or other stakeholders, when large sums of money have already been invested and high visibility attained for global goals, which are perceived as inconsistent with local priorities. Among the many considerations that must be taken into account if another disease is selected for eradication, the political contexts and feasibility will need to be assessed, particularly in priority endemic regions. Rather than leaving the most difficult settings for last, it will be important to make a concerted effort to address isolationist enclaves first, and monitor the ebb and flow of conflict situations to take advantage of any windows of opportunity to clear infection from those areas affected by violence and instability.

Finally, a global programme like eradication depends fundamentally on trust. The 'true believers' (Closser, 2010) of polio eradication believe fervently in the power of the international community to be a force for good in the world, but not everyone in the world shares this view. For many, the global order is a menace; a vestige of imperialism that imposes unwanted ideologies under a pretext of humanitarianism. The greater good of polio eradication is not self-evident; rather, each locality judges the GPEI by the amount of good it brings to their community in particular. This makes it a practical necessity, as well as a moral obligation, that eradicators earn their trust the hard way, listening to and answering the needs of the people, if they are to reach their goal.

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