

VIEWPOINT

Security, Insecurity, and Health Workers

The Case of Polio

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In 1988, the World Health Assembly set the goal of eradicating polio by the year 2000. At the time, there were about 350 000 polio cases each year. Although polio has yet to be eradicated, there were only 223 polio cases worldwide in 2012—a tremendous achievement (Table).^{1,2} As of March 27, 2013, there had been 16 polio cases in 2013 compared with 40 in the comparable period of 2012.²

Getting to 0 polio cases globally remains a substantial challenge. Polio is endemic in 3 countries—Afghanistan, Nigeria, and Pakistan. Each country is in the midst of conflict and insurgency. In some areas, the health workers who deliver polio vaccines have been targeted for violence or death. Nonetheless, there is a tremendous resilience and dedication among health workers. Many persist in serving their communities, despite the uncertain environments and known security risks.

In December 2012, 9 polio workers were murdered in Pakistan.³ On New Year's Day 2013, 7 volunteer community workers were killed in Pakistan while working for a nongovernmental organization that delivers polio vaccinations and other health services. Twelve of the 16 workers who were killed were women. This February, a policeman assigned to protect polio workers was shot and killed near Mardan, Pakistan, while accompanying a worker providing vaccinations. In March, in Landikotal, Pakistan, near the Afghanistan border, armed militants attacked a team of vaccinators; the vaccines they were carrying were taken, and the workers were warned to never come back again. All of these events have taken place in the same areas in Pakistan where the polio virus persists: Karachi city, Balochistan province, the Federally Administered Tribal Areas (FATA), and the Khyber Pakhtunkhwa.

Across the border from Pakistan is the locus of remaining polio in Afghanistan. The southern part of Afghanistan is also an area of high insecurity and conflict. Afghanistan and Pakistan "repeatedly re-infect one other, with Afghanistan appearing to receive a higher share of the poliovirus importations" according to the Global Polio Eradication Initiative.⁴

The situation in Nigeria, 4000 miles from Afghanistan and Pakistan, is perhaps the most challenging. Between 2010 and 2012, the number of polio cases increased nearly 60%. All 3 strains of the polio virus—wild types 1 and 3 and vaccine-derived type 2—continue to circulate in Nigeria, in the northern part of the country. The militant group Boko Haram operates in northern Nigeria, making security concerns particularly acute. In addition, there is historic suspicion of the polio vaccine and those who administer it. The suspicion dates to the 2003-2004 boycott of the polio vaccine in 5 northern Nigerian states owing to distrust of the West and ru-

mors that the vaccine contained ingredients that could render recipients sterile. The boycott, which lasted 11 months in Kano state, led to the retransmission of polio to 20 countries—as far away as Indonesia.

In February 2013, 9 female health workers were killed in the clinics where they worked, also in Kano, Nigeria. The day before the murders, an Islamic cleric, speaking on a local radio program, expressed distrust of the motives of the polio eradication effort. Journalists working for the radio program were arrested; the station's license was suspended for "inciting" violence and provoking the killings.

Conspiracy theories and suspicions about the motives of the global polio eradication initiative are not new. Distrust of vaccination programs was further fuelled by the US Central Intelligence Agency's decision, in May 2011, to send a hepatitis B vaccination team into the compound of Osama Bin Laden to gather DNA samples and confirm his location.⁵

Of course, in addition to security and suspicions of the motives of vaccination programs, there are many challenges to eradicating polio. A recent report from the Independent Monitoring Board of the Global Polio Eradication Initiative⁶ lists "essentials," which allow polio to persist under the title "All a Virus Needs to Survive in 2013." The list includes low parental demand for the vaccine, weak local leadership, high vaccine refusal rates, underserved nomads and migrants, and underfinanced programs.

In Afghanistan, Nigeria, and Pakistan, security risks and other challenges are not unique to the polio initiative. In the same week several months ago that 16 polio workers were killed in Pakistan, 23 policemen were also murdered. However, the high-profile nature of the global polio effort, particularly as it approaches its goal, appeals to attackers. Seeking to create an environment of fear and anxiety, they increasingly use terrorism to spread fear and despondency among polio workers and communities at large. The global attention to polio eradication also makes vaccination attractive as a bargaining chip—from villagers in Pakistan refusing polio vaccine until they are given basics such as clean water and electricity,⁷ to the Taliban leaders of northern Waziristan, Pakistan calling for a halt to US drone attacks before they will allow vaccination efforts to proceed.

What can be done to prevent more violence against health workers as the global polio eradication effort approaches its goal? The latest draft of the Polio Endgame Strategic Plan 2013-2018⁸ recognizes that the usual modus operandi will not work. House-to-house surveys, for example, are invaluable in understanding the sentiments of parents and caregivers, whose confidence and willingness to accept a vaccine for their chil-

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Table. Polio Cases From Wild-Type Polio Virus in Afghanistan, Nigeria, and Pakistan, 2010-2012

Country	2010 ¹	2011 ¹	2012 ²
Afghanistan	25	80	37
Nigeria	21	62	122
Pakistan	144	198	58
Total	190	340	223 ^a

^a Of the 223 cases of polio reported in 2012, 217 were from the 3 listed countries. The other 6 cases were imported into Nigeria's neighboring countries of Chad (n = 5) and Niger (n = 1).

dren is crucial to the eradication program. However, household surveys on reasons for vaccine refusals will not provide insights about pending security threats or about the hesitancy and concerns of workers who administer the vaccines. More security is needed to protect health workers from terrorists who deliberately target them. According to the strategic plan of the Global Polio Eradication Initiative, "Health worker safety has become paramount."⁸ The strategy calls for security training for polio workers, better ways to get the frontline workers and permanent polio teams the cash they need to operate in insecure areas and at important border crossings, and close cooperation between polio programs and the communities in which they work.

In situations of insurgency and conflict, mass polio vaccination campaigns may not be the most appropriate strategy. Thus, the end-

game strategy proposes finding ongoing vaccination opportunities outside of the usual schedule of door-to-door vaccination in large campaigns and integrating polio programs with other health programs, such as those for maternal and child health, nutrition, and other immunizations.

The Global Polio Eradication Initiative has demonstrated that it is willing to change its approach in response to the realities of conflict and insurgency. There is a critical need to gain support at the local level in Afghanistan, Nigeria, and Pakistan, and to maintain support for the thousands of polio workers in the field.⁹ A coherent and flexible strategy for polio eradication will require collective ingenuity in addressing public health and the immunization needs of the populations at risk.¹⁰ And the exploitation of polio vaccination and other health initiatives for political or military goals must end.

ARTICLE INFORMATION

Published Online: April 29, 2013.
doi:10.1001/jamainternmed.2013.7191.

Conflict of Interest Disclosures: None reported.

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