

Pakistan, politics and polio

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The United Nations Secretary General's concern over the recent resurgence of polio cases in Pakistan should focus global attention on the country for reasons other than security, terrorism and conflict. As one of the four countries of the world now harbouring the disease, Pakistan faces many geopolitical and socio-economic challenges. While these threaten the country in many ways, they also pose a challenge for global health and jeopardize worldwide efforts aimed at eradicating polio. As long as a single child remains infected, children in all countries are at risk of contracting polio and we will not achieve the global goal of eradicating a disease for the second time in history.

The Polio Eradication Initiative was launched in Pakistan in 1994, 15 years after the launch of the Expanded Programme for Immunization; the latter is mandated to undertake routine immunization activities. Since 2000, the Polio Eradication Initiative has been following the successful approach in developed countries supplementing routine polio immunization with huge country-wide campaigns several times a year to deliver drops of oral polio vaccine to every child under the age of five years. Over the past 9 years, 88 rounds of Supplementary Immunization Activities have been conducted with nationwide coverage funded by the Global Polio Eradication Initiative – a global partnership of the World Health Organization, United Nations Children's Fund, the Centers for Disease Control and Prevention, Rotary International and other major donors.

Initial success of the Polio Eradication Initiative in Pakistan was remarkable. The number of confirmed cases of poliomyelitis based on acute flaccid paralysis surveillance data from across the country declined from 1155 cases in 1997 to 28 in 2005 – the lowest ever recorded in one year. A very sensitive nationwide reporting system was built up to assure the detection of all remaining polio cases. The system captures all

children aged less than 15 years with acute onset flaccid paralysis, and includes subsequent laboratory testing of stool specimens.¹ However, since 2008, there has been a marked resurgence of polio cases, both in aggregate terms and in relation to geographical spread (Fig. 1 and Fig. 2); in 2008, eight cases were reported in Punjab – the largest province in Pakistan, home to more than 60% of the country's population – compared to zero cases reported in 2007.

Failure to achieve polio eradication demonstrates the importance of determinants outside the health sector in influencing health status. The resurgence of polio in areas far from the western border, such as in Punjab province, indicates that weaknesses in the delivery of services and broader issues of health systems governance are a major factor in the failure to achieve eradication. Pakistan's mixed health system can be defined as a system in which out-of-pocket payments and market provision of services predominate in an environment where publicly-financed government health delivery coexists with privately-financed market delivery. Here, a triad of insufficient public-sector funding, a poorly regulated private sector and lack of transparency in governance act together to compromise the quality and equity of public services.^{2,3} Although the Polio Eradication Initiative is well funded, the public infrastructure through which it is delivered remains under-financed. It is consistently observed that the system provides opportunities in many areas for institutionalized malpractice, primarily geared towards pilfering resources from the system. Staff misconduct is often ignored due to collusion between staff and inspectors. As a consequence, staff remain absent from duty, do not run field operations and divert vaccine for use in private facilities; service delivery is therefore undermined both qualitatively and quantitatively, and costs are levied for services that are meant to be provided for free.⁴

There are frequent anecdotal reports of vaccinators engaging in petty theft in the field, e.g. by charging money for vaccination cards and syringes that they receive at no cost and by selling part of the vaccine stock to private hospitals. The recent open-vial policy, under which the field vaccinator has the prerogative to open a multi-dose vial even for one child so as to maximize vaccination coverage, is particularly abused in this way. According to anonymous observations, these already-prevalent issues have been growing more serious in recent months due to worsening governance, notably preferential treatment in staff deployment and rapid turn-over of programme managers and they appear to be partly responsible for resurgence of polio from 2008. The most important reason for the delay in interrupting poliovirus transmission in Pakistan therefore relates to "failure to vaccinate" during Supplementary Immunization Activities. Vaccination coverage in critical areas is not high enough to interrupt transmission and then to maintain that achievement.

The reasons for failure to achieve polio eradication also show the importance of non-health sector issues such as access in war and conflict zones, refusal of parents to vaccinate their children and problems with cross-border movement of nomadic populations from Afghanistan.⁵ Twelve per cent of Pakistan's territory in the Federally Administrated Tribal Areas is currently under conflict where Pakistan's armed forces are fighting an insurgency. These organized factions make it effectively impossible to deliver services to war-ridden populations. "Talibanization" (the introduction of practices from the Islamic Taliban movement) and misinterpretation of religion has led more than 90% of the clergy in conflict-ridden zones to campaign against polio vaccination on a wide scale, causing parents to refuse vaccination for their

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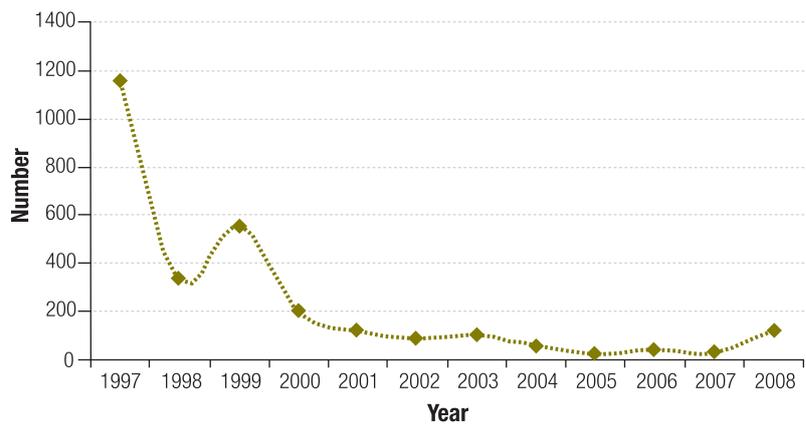
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children on the mistaken grounds that it is *haram* (forbidden by the religion).⁶ With the spreading wave of “talibanization” outside Pakistan’s specially administered areas and the indoctrination of these beliefs among the illiterate masses, this unfortunate notion is likely to spread across the country.

Weaknesses in other government services can also affect polio control efforts. Poor sanitation and lack of clean water mean diarrhoeal diseases are still the third commonest cause of death in children.⁷ Diarrhoeal diseases can interfere with the absorption of polio vaccine. With an average of 8 hours per day of electricity cuts due to load-shedding, maintaining the cold chain for vaccine storage may become a problem, although there is no direct evidence yet of its impact on results of the Polio Eradication Initiative.

Failure to achieve relatively straightforward targets with these comparatively well-resourced initiatives shows the seriously eroded capacity of the public system to deliver services. Broad-based reform is needed to address systemic weaknesses. Unfortunately

Fig. 1. Number of confirmed cases of poliomyelitis in Pakistan, 1997–2006



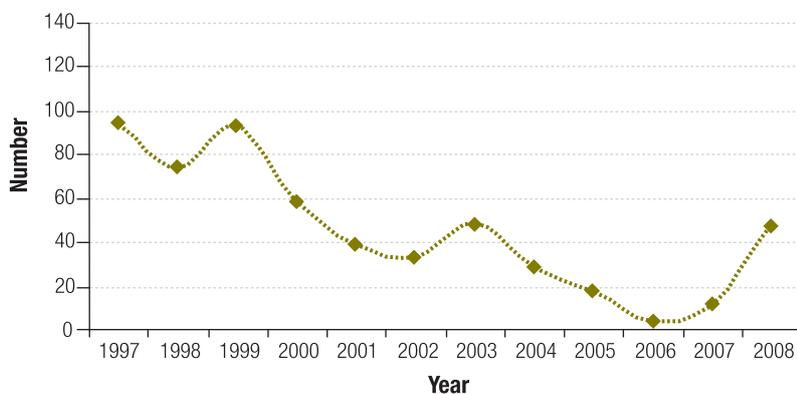
Source: National Surveillance Cell, Expanded Programme on Immunization, Ministry of Health, Government of Pakistan, Islamabad.

this does not appear to be a current priority as the country struggles on many diplomatic and security fronts. Successful reform cannot be implemented over the short term, even if there is a political will; therefore, emergency measures similar to those adopted during disasters and wars are required. Drawing lessons from China’s example in polio

eradication, Pakistan should develop a plan for grand national immunization days, where the entire organizational force of the government should be put behind polio eradication. The outreach drive in national immunization days must go beyond traditional vaccinators to involve actors that can deliver services in disaster zones. Second, the government should commit to providing a maximum of resources to ensure a seamless supply chain that includes airlifting of vaccines, access to areas on horseback and possible imposition of a military curfew for the duration of the campaign. Third, through the creative use of quotes from the Quran (the holy book of Islam), polio eradication can be presented as a “right to life” issue. Improved understanding of the religion may assist in negotiating access in areas where refusal is an issue and soliciting a ceasefire for vaccination campaigns. For all we know, this could be a step towards peace in Pakistan’s war-riddled zones. ■

Competing interests: None declared.

Fig. 2. Number of districts with confirmed poliomyelitis cases in Pakistan, 1997–2006



Source: National Surveillance Cell, Expanded Programme on Immunization, Ministry of Health, Government of Pakistan, Islamabad.

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