

**Case  
Study**

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**Non-State Actors & Global Health.  
Eradicating Polio in Pakistan.  
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Since 1988, the number of **cases of polio across the globe** has been reduced by more than 99%. Eradicating polio would create a global public good, producing some **40 to 50 billion USD in savings** from avoided treatment costs and gains in productivity.

These **gains can only be achieved if immunization coverage is universal**. If polio remains prevalent in just one country in the world, even polio-free countries must continue immunizing in order to avoid importation of the disease.

However, the **polio eradication efforts are in danger**. In Eastern **Syria**, where polio had been absent for the last fifteen years, thirteen cases were confirmed in November.

In **Pakistan**, the immunization efforts have been under attack for a number of years. **Violence and even killings against vaccination workers** are prevalent.

The **difficulties in eradication in Pakistan** are rooted in four main areas: (1) Pakistan's weak state and health system, particularly in the tribal areas; (2) Ongoing conflict in the region, including drone strikes; (3) Prejudices against the polio vaccine; (4) Backlash against the instrumentalisation of health campaigns by security and intelligence agencies.

The case of polio eradication in Pakistan sheds light on the **very different roles that non-state actors can play, both positive and negative**. The outcome of a global initiative depends, to a considerable degree, on the national and local interplay between international organizations, NGOs, national and foreign security agencies, national health agencies, religious groups and militant leaders.

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## Introduction

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Polio has returned to the spotlight on the global health stage. In Eastern Syria, thirteen cases of patients with acute paralysis, the hallmark of this highly infectious disease, were confirmed in November. Civil war and the breakdown of the preventive health system have enabled the importation and spread of this illness after being eliminated from the region fifteen years ago. Today we face a serious risk that all the endeavours undertaken so far may have been in vain. Smallpox could remain the only human disease eradicated in the history of mankind.

For more than two decades, the international community has joined forces to eliminate the poliomyelitis virus through coordinated vaccination efforts. In 2012, things were looking bright as India had been declared polio-free for two years and only three countries around the globe saw cases of polio: Afghanistan, Pakistan and Nigeria, where pockets of children without access to the vaccinators remained. However, at the end of the last year, things took a turn for the worse: targeted killings of health workers shook the global health community and the growing influence of non-state actors on the local as well as global level raised questions about the current *modus operandi* of the campaign.

In this paper I aim to describe some of the problems the eradication program is facing in the tribal areas in north-western Pakistan. These issues subsequently impede global success in eradicating polio: analysis of the recent resurgence of the virus in Syria has shown that the Syrian strain is related to one previously imported to Egypt from Pakistan. The complex interplay between states, international governmental organizations and non-state actors (armed and non-armed) in its intriguing geopolitical setting on the frontier between Pakistan and Afghanistan gives us the opportunity to discern important features of non-state actors and analyse their influence on a global health campaign.

The first part of this paper presents the global partnership for polio eradication in its current configuration and describes some of the requirements for the campaign. The second part describes some of the recent setbacks, such as the targeted killings of health workers in Pakistan, and focuses on the specific problems in their geo-political and cultural context: the so-called “tribal areas” bordering on Afghanistan. The third part offers a summary of the role of non-state actors and their interaction with state as well as international actors in this intricate situation.

## Part I – Eradicating a Disease: Polio

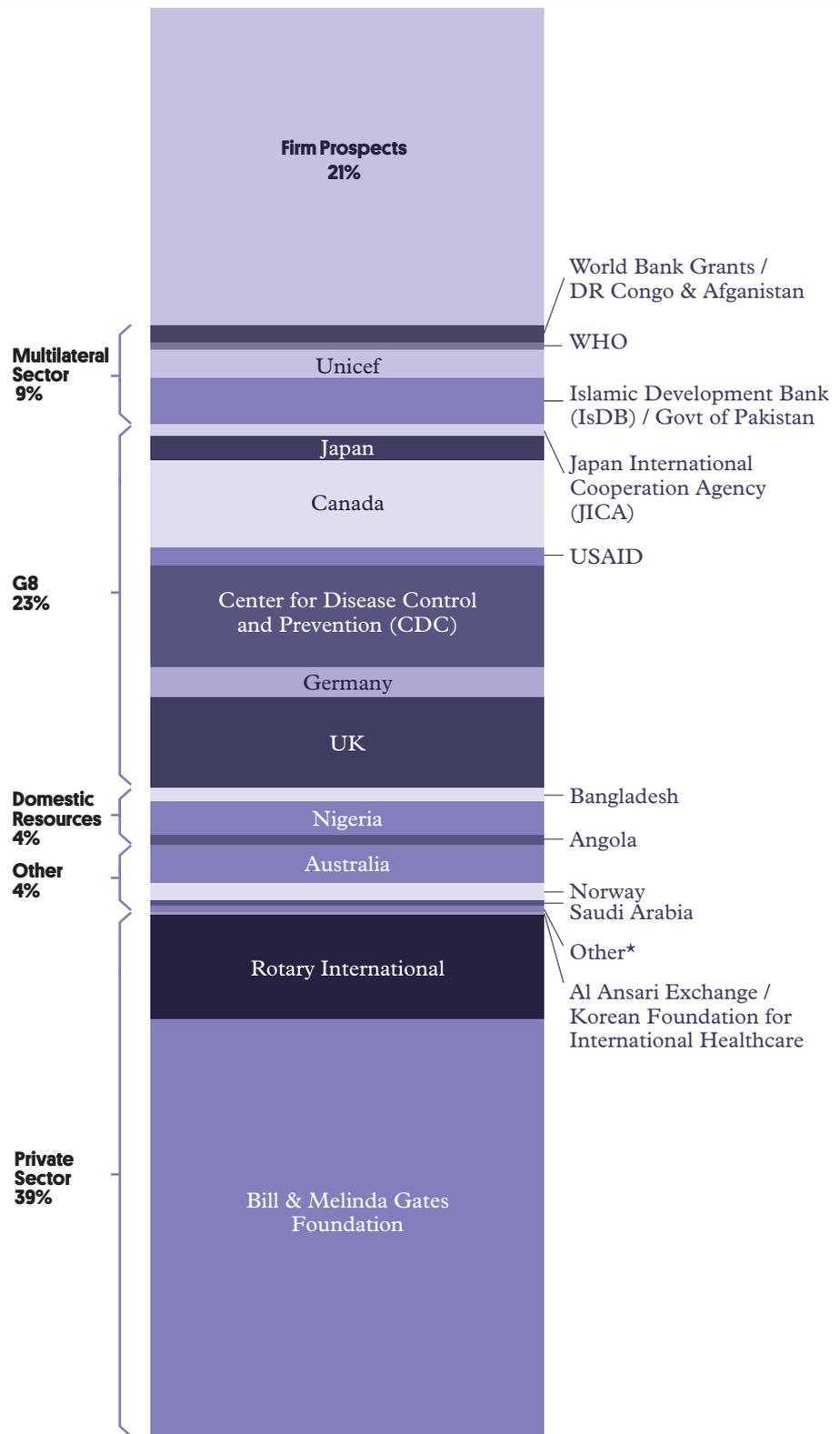
As humans are the only host of polio virus (and therefore its single possibility to replicate), it is possible to completely eradicate the disease through vaccination. Eliminating this disease worldwide would create a “global common good” and apart from alleviating suffering, will produce important economic benefits: a 2010 study estimated the net benefits at about 40 to 50 billion US dollars, largely in savings from avoided treatment costs and gains in productivity.

Since its launch at the World Health Assembly (WHA) in 1988, activities coordinated by the Global Polio Eradication Initiative (GPEI) have reduced the number of cases across the globe by more than 99%: from an estimated 350,000 paralyzed persons in the 1980s to less than 230 in 2012. The GPEI is a public-private partnership led by national governments and spearheaded by the WHO, UNICEF, the United States CDC (Center for Disease Control and Prevention), Rotary International, and the Bill and Melinda Gates Foundation. So far, the program is estimated to cost 10.5 billion USD for the period from 1988 through 2014. The United States account for about a fifth of total expenditures, with contributions of the private and philanthropical sector gaining importance in the last decade. In 2013, the private sector contributed around 39% to the budget and the G8 nations around 23%. Currently, there is a gap in funding estimated at 21%, or 217 million US dollars.<sup>1</sup>

A cornerstone of the polio eradication strategy is the need to ensure more than 80% immunization coverage of children in the first year of life with at least three doses of oral polio vaccine as part of national routine immunization schedules. If uniformly high immunization coverage cannot be maintained, pockets of non-immunized children build up, favouring spread and outbreaks of the poliovirus. Furthermore, until full eradication is achieved, even polio-free countries must continue to ensure high levels of immunization coverage in order to prevent the re-establishment of poliovirus through importations from other countries. The virus can reappear via international travellers, migrant populations or population sub-groups who refuse immunization.<sup>2</sup>

The consequences are global and can be extremely far reaching: in January 2013, poliovirus related to strains circulating in Pakistan was detected in the sewers of Cairo, Egypt – over 3000km away. Just this month, it was discovered that the origin of the virus responsible for the recent outbreak in Syria lies in the same tribal areas of the Pakistan-Afghanistan border region.<sup>3</sup>

**Figure 1**  
**Global Polio**  
**Eradication**  
**Initiative**  
**Financing, 2013**



\* 'Other' includes: the Governments of Brunei Darussalam, Finland, Luxembourg, Monaco and Nepal, plus the GOOGLE Foundation/ Matching Grant.

## Part II – Case: Eradicating Polio in Pakistan

### Blows to the Eradication Efforts in Pakistan

Polio eradication efforts suffered a serious blow at the end of 2012, when Pakistani vaccination workers were targeted directly for the first time. In an unprecedented spark of violence, four women and three men were shot dead in two apparently coordinated attacks. No responsibility has been claimed, but various militant Islamic groups have repeatedly expressed their opposition to the vaccination activities. Following the events, the vaccination drive was temporarily suspended by the coordinating bodies.<sup>4,5</sup>

Another killing happened in May 2013, when gunmen fired on two female health workers administering polio vaccines in the town of Peshawar, killing one and wounding the other. Again, it was not immediately clear who was behind the attacks. However, the attack was perpetuated soon after a US drone strike killed the second in command of the Pakistani Taliban in the region bordering on Afghanistan.

Since mid-2012, two local militant leaders have opposed themselves to vaccination activities. They demand the cessation of US drone strikes as a precondition for allowing immunization teams to access afflicted populations.<sup>6</sup> However, establishing diplomatic contacts to negotiate with these armed groups has proved very difficult due to the independent command structures, mostly opaque decision making processes and measures the groups have taken as a precaution against western intelligence-gathering activities.

### Analysing the Obstacles to Polio Vaccination in the Tribal Areas of Pakistan

A recent review by Tariq Khan and Javaria Qazi<sup>7</sup> has identified the main areas that pose problems to immunization efforts in Pakistan. In the region bordering Afghanistan, the four following fields require special consideration:

**A. Weak Health System:** A feeble infrastructure and inefficient management in the healthcare sector allow dents in vaccine delivery, thus creating problems in the progress of the programme. Furthermore, low salaries and life-threatening conditions for health workers lead to a decline in available vaccinators.

**B. War and Conflict:** Armed conflict, common in Pakistan and Afghanistan, leaves a question mark on the future of the efforts in the area. The war against terrorism seems endless, leaving the polio elimination drive lagging behind in the conflict-affected areas.

**C. Prejudices against the Polio Vaccine:** Whether the result of conservative culture, reduced awareness, forced endorsement by militants or false propaganda, societal opposition is hindering the campaign.

**D. Political Will and Instrumentalisation:** It is highly damaging when parties involved hijack the concerns of the people to serve their own political agenda or use the health sector for military or intelligence-gathering purposes. Cooperation between all political actors involved (local, national and international) is critical. In addition, donor fatigue is an issue, which must be countered by joint efforts to mobilize the international community.

### A. Weak State and Health System in the Tribal Areas

Most of the incidents described above, which have severely damaged Pakistan's national eradication initiatives and by extension the global eradication campaign, took place in Pakistan's tribal areas. These Federally Administered Tribal Areas (FATA) comprise 27,220 square-km and are directly governed by Pakistan's federal government through a set of laws originating in the 19<sup>th</sup>-century British colonial times.<sup>8</sup> Home to about 3,175,000 people, where only 3.1% of the population resides in established townships, the FATA is the most rural administrative unit as well as the most impoverished part of the nation.

The territory is almost exclusively inhabited by the Pathans, who form the second-largest ethnic group in Pakistan and who also live in neighbouring eastern Afghanistan. The tribes living between British India and Afghanistan were formally cut off from Afghanistan in the 1890s by the frontier drawn by Sir Mortimer Durand, and the line named after him. Unchecked movement between or within tribes across the 2,400 km-border has always been relatively easy, as the terrain is rugged and mountainous. The anti-Soviet war of the 1980s in Afghanistan weakened this border still further, with Pakistani Pathans encouraged by both Pakistan and the West to see Afghan refugees and the Mujahidin as their brothers and to fight alongside them.<sup>9</sup>

**Figure 2**  
**Map of the FATA**  
**(Federally Administered Tribal Areas)**  
**in Pakistan**



Source: GAO/USAid via Wikimedia Commons

### The Pakistani Taliban

In 2007, militant groups operating in the border areas came together to form the Pakistani Taliban. They declared themselves to be an ally both of the Afghan Taliban and of Al Qaeda in a defensive jihad against the US war and occupation of Afghanistan. The Pakistani Taliban is not nearly as tight a movement as the decentralized Afghan Taliban: it consists of a loose alliance of autonomous Islamist radical groups

and commanders under the nominal leadership of an *amir*. The first *amir*, Beitullah Mahsud, was killed by a US drone strike in August 2009 and was succeeded by Hakimullah Mahsud, who himself was killed by a US drone attack at the beginning of November 2013.<sup>10,11</sup> Over the past decade, Pakistani Taleban groups have gained significant power, particularly in the tribal agencies. Amid increasingly dysfunctional state institutions, the militants have dismantled or assumed control of an already fragile tribal structure.

A key feature of the Taleban militancy is the systematic attack on people suspected of behaviours in violation of the Taleban's interpretation of the principles of Islam. Following this line, they prohibited vaccination campaigns for children, schooling of girls, and women working outside the home. Foreign non-governmental organizations especially, most of them working in the social or health sector, were considered suspect as they had acquired a reputation of working for donor interests rather than Pakistani national interests.<sup>12</sup>

### Health System

Pakistan adopted the Global Polio Eradication Initiative (GPEI) within the Expanded Program on Immunization (EPI) back in 1994. However, health has never been a political priority in Pakistan, as revealed by the low fiscal support it receives. Total spending on health in 2011 was about 2.5% of Pakistan's gross domestic product (GDP), which is quite low by international comparison – in India, this percentage stands at 3.9%, in China 5.2%, Iran 6.0%, and Brazil 8.9%.<sup>13</sup>

Furthermore, health is considered one of the most corrupt public services. Health governance issues are compounded by fights over the local government system after a 2001 reform stalled with a change in government in 2008. A comprehensive policy is needed to address the current shortfall in human resources, by developing systems for retention, education, and training of staff, as well as capacity building. It is noteworthy that Pakistan is the only federal country in the world without a central coordinating body – a ministry, state department, directorate, or equivalent structure – at the national level in charge of country-wide responsibilities for health.<sup>14</sup>

## B. War & Conflict

### Drone Strikes as Diplomatic Leverage

In 2004, a CIA-run drone program was started to target militants in Pakistan's FATA. Given the covert nature of the program, it is difficult to gauge the impact of the strikes: both the military and militants have obstructed access for neutral observers. Independent organizations estimate the total number of drone strikes in Pakistan at about 370 from 2004 to 2013. The estimates for total number of casualties range from 2071 to 3413 people; civilian deaths are estimated between 258 and 307. The number of people injured is expected to lie between 1177 and 1483.<sup>15</sup>

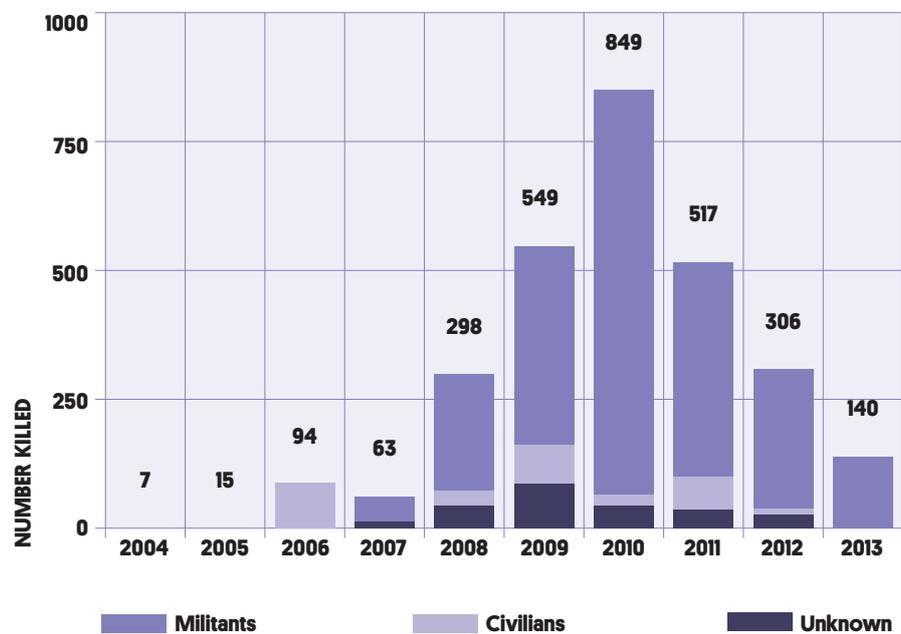
In June 2012, after the fifth drone strike in two weeks, the militant leaders of North and South Waziristan declared a ban on vaccinations until US drone strikes ceased. As it stands, the polio vaccination campaign in the FATA matters more to outsiders than it does to the tribal areas' residents themselves, and as such it provides a tempting target for militant groups desperate for any kind of diplomatic leverage.

The general impact of drone activity on the population is a question of debate. While reported "signature" strikes – which target groups of men

based on behaviour patterns associated with terrorist activity rather than known identities – may heighten local alienation, they certainly weaken the capacity of the militants.<sup>16</sup> However, other commentators hold that conflict in the Islamic world has led to the growth of a Jihadist mentality, a connection which cannot be underestimated. They argue that suicide bombings in Afghanistan and Pakistan were unheard of until recent years, and that the advent of killing by remote control through drones has led to “a veritable bonanza for recruiters” to the Taleban cause from among the survivors.<sup>17</sup>

The Pakistani High Commissioner to London, Wajid Shamsul Hasan, argues that US drone strikes risk significantly weakening Pakistan’s democratic institutions: “What has been the whole outcome of these drone attacks is that you have rather directly or indirectly contributed to destabilizing or undermining the democratic government. Because people really make fun of the democratic government – when you pass a resolution against drone attacks in the parliament, and nothing happens. The Americans don’t listen to you, and they continue to violate your territory.”<sup>18</sup>

**Figure 3**  
**Casualties**  
**by Type**  
**each Year**



Totals are an average of high/low estimates

Source: NewAmerica.net

### C. Vaccination Conspiracy Theories & The Muslim Sterilization Myth

Rumours about safety have plagued many immunization programs, including in developed countries, where there are groups and websites devoted to theories about the links between immunizations and conditions such as autism. Occasionally, rumours arise regarding immunization and family planning or that vaccination could cause HIV/AIDS. While these rumours are groundless, when they spread, they can severely damage immunization efforts.<sup>19</sup>

After the targeting of health workers in Pakistan, the GPEI met with Islamic scholars in Cairo, Egypt on 6–7 March 2013. The objective of the consultation was for Islamic religious and technical leaders from countries of the region to brainstorm on the best strategies to demonstrate solidarity across the Islamic world in order to ensure the protection of Muslim children against polio. The meeting concluded with an agreement that the polio vaccine is safe, effective and in accordance with Islamic law, and that immunization is a religious and

social responsibility for everyone. Indeed, preventing immunization is forbidden by Islam.<sup>20</sup> Furthermore, suggestions were developed to ensure protection of Muslim children against polio, including: effectively disseminating Islamic rulings and information along with the training of imams, and holding meetings on polio vaccination with Islamic scholars in each of the three affected countries, at both the national and local level.

#### **D. Misuse of Health Neutrality: The Fake Vaccination Campaign**

There are rare but well-documented examples in history where military and intelligence agencies have used humanitarian relief or health efforts for their own purposes, undermining the neutrality of those operating by the accepted rules of humanitarian assistance. For those who work in politically unstable settings where armed conflicts are under way, the pledge of health neutrality is essential.<sup>21</sup>

In the lead-up to the May 2011 targeting of Osama bin Laden in Abbottabad, Pakistan, the US Central Intelligence Agency (CIA) organised a fake hepatitis vaccination programme near a compound where it believed Osama bin Laden was hiding in an elaborate attempt to obtain DNA from the fugitive al-Qaida leader's family. Bypassing the management of the Abbottabad health services, a Pakistani doctor paid generous sums to low-ranking local government health workers, who took part in the operation without knowing about the connection to Bin Laden. Health visitors in the area were among the few people who had gained access to the Bin Laden compound in the past, administering polio drops to some of the children.<sup>22</sup>

The ploy appears not to have worked in the bin Laden compound: the team was kicked out. Nonetheless, in an interview in June 2012, US Defence Secretary Leon Panetta acknowledged the move and said it "helped provide intelligence that was very helpful with regard to this operation". Pakistani intelligence became aware of the doctor's activities during the investigation into the US raid and detained him soon after. In May 2012, he was sentenced to 33 years in prison for conspiring against the state and his role in trying to help the CIA track Osama bin Laden.<sup>23</sup>

In February 2012, in a letter to the CIA director General Petraeus, the president of InterAction – an association of about 200 US-based NGOs, many with humanitarian operations in Pakistan – expressed his deep concern about the erosion of trust caused by the CIA's use of health actors as a cover. He insists that the fake health campaign has not only reduced NGOs' ability to deliver programmes in Pakistan, but also led to an uptick in targeted violence against their workers.<sup>24</sup>

## Part III – Analysis: The Complex Interplay of Actors in Polio Eradication in Pakistan

The present paper has provided an overview of the unique difficulties in eradicating polio in Pakistan. **How these challenges are handled will have consequences reaching far beyond national borders.** In case of failure, the disease will not be eliminated nationally and consequently internationally, thus creating a global public bad. In case of success, as achieved with smallpox (the only communicable disease ever completely eradicated from earth), polio will disappear and a global public good will be generated.

Economic theory holds that **providing global public goods yields benefits across populations, countries and generations - present and future.** In economic terms, if polio is fully eradicated, all countries will be able to halt vaccination campaigns and polio-related productivity losses will be stemmed, leading to savings in the order of 40 to 50 billion USD. These attractive benefits, however, are not likely to be provided by unfettered market forces. By nature, global public goods are difficult to provide, as no-one can be excluded from accessing the goods once produced and – when the goods are in their purest form – no charge can be levied for their use. Since producers of the good cannot in principle recoup the costs of providing it, there is little incentive to invest in its provision. Moreover, free-riding, as in all public goods, is an attractive option.

**For most global public goods therefore, a constellation of actors must come together in order to provide them.** These may include international governmental organisations, NGOs, private-public partnerships, national governments, and others. In the case reviewed in this paper, all of these actors play a role, from the Pakistani government and its health services to the Global Polio Eradication Initiative (GPEI), the WHO and the Bill and Melinda Gates Foundation. However, as described above, the weakness of the Pakistani administration complicates the initiatives to eradicate polio. **Weak institutions, extended conflict and porous borders** leave many open doors for the intervention of non-state actors (NSAs).

The case of polio eradication in Pakistan sheds light on the **very different roles that NSAs can play**, both positive and negative. On the one hand, the **Pakistani Taliban's** prohibition of and attacks on vaccination campaigns and its workers – considered to be in violation of its interpretation of the principles of Islam – greatly imperilled the continuance of the campaign. On the other hand, declarations by a **coalition of religious scholars and by the IIFA** (International Islamic Fiqh Academy) that the polio vaccine is safe and that immunization is a universal religious and social responsibility lent counterweight to the Taliban's actions.

The Pakistani polio case also reveals **complex interplays between state and non-state actors**. It is argued that the US **drone attacks** in Waziristan and the Pakistani government's inability to stop these attacks provoked the ban on vaccinations issued by Waziri militant leaders. Global health (in the form of the eradication of polio) was held hostage to the cessation of drone attacks. The **US intelligence community's use of the cloak of vaccination campaigns** to analyse DNA from the compound thought to harbour Osama bin Laden provides another clear example. The backlash it unleashed against vaccination campaigns was highly damaging.

In contrast to the abovementioned dynamics, it is important to recall that **health leverage can also be put to an entirely different use, as a diplomatic tool**. In the Pakistani case, for example, funding to eradicate polio should be included as a diplomatic issue in any transition process: it should be on the table in the political negotiations and contacts both with the Afghan and Pakistani governments and with non-state actors. As indicated earlier, even the mere establishment of diplomatic contact with the armed parties is difficult. Nevertheless, upon engagement, funding to eradicate polio should be included in the discussions. It will be a prerequisite to any negotiating process that information about this health issue and its funding is well developed and transparent. Furthermore, multilateral actors such as the UN and UNICEF should define a clear strategy on this issue and engage with all (empowered) actors in the region, including the non-state actors in the tribal areas.

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## Conclusion

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However, as shown above, national security and counter-terrorism would seem more important than public health, especially for the USA. To underscore this point, one could consider US military spending in the Afghanistan war alone and compare it to the total cost of polio eradication (10.5 billion USD). Starting in October 2001, the US has spent an estimated 675 billion USD on its military activities in Afghanistan.<sup>25</sup>

To conclude, it seems that today, national interests easily overrule public health considerations, especially if the health issue in question (polio) has been almost forgotten in the industrialized world. The recent outbreak in Syria, tragic as it is, could provide an opportunity to mobilize forces and pressure all actors to unite and cooperate in order to achieve this *global public good*.

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