

“Sehat Ka Insaf”: A Model for Overcoming Polio in Pakistan

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INTRODUCTION

Poliomyelitis, more commonly known as polio, is a highly infectious disease caused by poliovirus. The virus enters through the mouth or nose and colonizes the gastrointestinal tract, spreading primarily through feces, unclean hands, contaminated drinking water and improper sanitation. The condition primarily affects children under the age of five and induces damage in motor neurons, triggering a variety of symptoms including fever, fatigue, headaches, vomiting, stiffness of neck and pain in limbs.¹ In approximately one in 200 infections, the virus enters the central nervous system, leading to irreversible paralysis.²

In 1988, when a startling 350,000 cases of polio were reported worldwide, the World Health Assembly resolved to eradicate poliovirus and launched the Global Polio Eradication Initiative.¹ Although the global eradication plan has reduced the number of cases of polio from 350,000 in 1988 to 223 reported cases in 2012, the final endemic reservoirs of resistance in Nigeria, Afghanistan and Pakistan have provided the greatest hardships for public health authorities.² In these countries, polio persists at the margins of society where critical health services are lacking or even nonexistent. As a result, the greatest challenge for workers has been to vaccinate enough children to drive immunity levels above a threshold percentage, whereby herd immunity is achieved. Herd immunity is a form of immunity that occurs when a substantial percentage of a population is immunized from a virus, making those who are not immunized protected, because the virus cannot spread from person to person as easily. For the poliovirus, the herd immunity threshold percentage is between 80–86%.³

India was previously considered one of the most resistant countries to polio eradication efforts due to its poor sanitation, high population density and migrant communities. However, since India's strategies to eliminate polio proved successful in 2012, their novel techniques have been adopted in polio campaigns around the world, including in neighboring Pakistan. Despite Pakistan's efforts to modify their strategies based on India's model of success, Pakistan has not been able to completely interrupt polio transmission. The World Health Organization (WHO) writes that when proven eradication strategies, such as those of India, are fully implemented, polio transmission is halted.² Yet, it is ironic that Pakistan continues to struggle brutally in the fight against polio, despite having used proven techniques from India.

Upon closer examination, it becomes evident that Pakistan needs a more personalized strategy to eradicate polio. Unlike India, Pakistan faces a unique obstacle: terrorism. In recent years, Pakistan has witnessed several targeted murders of polio health care workers and targeted bombings of polio vaccination stations. To continue providing vaccination services despite the intentional killings of polio workers, the Pakistani health care authorities have enacted a new campaign, “Sehat Ka Insaf”, which has shown to be a resounding success in the polio stronghold of Peshawar and must be modeled throughout Pakistan and other terror-ridden strongholds of polio. Specifically, “Sehat Ka Insaf” is a blanket method of administering the polio vaccine along with eight other vaccines, hygiene kits

and vitamin A drops in order to circumvent polio-specific terrorist attacks in Pakistan. This article will first explore India's proven strategies to provide a comparison for the “Sehat Ka Insaf” campaign strategy and subsequently will examine polio-specific terrorism in Pakistan, culminating in an argument that the “Sehat Ka Insaf” model should be replicated nationwide in Pakistan until polio is completely eradicated.

PROVEN STRATEGIES IN INDIA

India, which was declared polio-free in February 2012, was originally hypothesized to be the last country in the world to end polio given its densely populated communities defined by poor sanitation and often migrant members.⁴ After failing twice to meet the eradication goals of 2000 and 2006, health care workers in India realized that more robust tactics were necessary to rid the virus in its most aggressive reservoirs.⁵ Normally, multiple doses of the polio vaccine are necessary to successfully immunize a child; however, healthcare officials had trouble accessing the geographically isolated areas native to India. Making frequent trips to these remote, mountainous communities was labor-intensive and required proper maintenance of vaccines during long trips.⁴ The greatest challenge in the preservation of vaccines was keeping them refrigerated at -20 °C in areas that were hard to reach and often lacked electricity. The shelf life of the vaccines also had to be closely monitored. For instance, while the oral bivalent types 1 and 3 poliomyelitis vaccine have a shelf life of 24 months at -20 °C, the World Health Organization advises that opened vials of the vaccine should only be used for up to 28 days.⁴ In addition, the mobile and migrant communities native to India made it difficult to keep track of which communities had yet to be vaccinated.⁴ Many populations were constantly on the move, searching for seasonal jobs or new shelter due to displacement by floods.⁶

In order to confront the nation's hurdles, India used a combination of innovative, micro-scaled techniques, including dispatching small teams of polio workers, marking children's fingers with enduring ink to assist in locating missed children in larger public venues and chalking houses to indicate unvaccinated children.⁴ In addition, when parents declined vaccines for their children, a second team of polio workers and highly-respected local villagers were dispatched to convince the parents that the vaccine would protect their children. Each new outbreak was monitored through intense surveillance tactics, and immediate action was taken when outbreaks occurred. If a number of outbreaks occurred within a certain community or city, an increasing number of health care workers were dispatched to vaccinate any unprotected members in the surrounding populations, and the outbreak was continually monitored on a map. Through accountability at all levels, India went from having 741 cases of polio in 2009 to zero cases in 2012.⁷ The 2.3 million vaccinators involved in the eradication effort provided 900 million doses of the oral polio vaccine for India's *hoi polloi*.¹ Not a single case of polio has been reported in India since January 2011.⁷

Ever since the global landscape witnessed India's triumph over polio, many countries, including Pakistan and Nigeria, have adapt-

ed India's micro-scaled and data-driven approach. While polio still remains endemic in Pakistan, Nigeria and Afghanistan, Pakistan is the only country experiencing a rise in the incidences of polio from 58 cases in 2012 to 83 cases in 2013.⁸ The increasing number of incidences in Pakistan can only be understood under the light of polio-specific terrorism and how it may be hindering polio eradication efforts.

TERRORISM IN PAKISTAN

Misconceptions held by Pakistani militants and some of the Pakistani public against the polio vaccines have complicated efforts to wipe out polio in Pakistan. Many Pakistanis believe that the polio vaccination drives are a cover-up for Western plans to spy on Pakistan or a scheme to induce sterilization in the recipients of the vaccine.⁹ Suspicions about Western ambitions to spy on Pakistan through polio eradication efforts originated in 2011, when American troops used the assistance of Pakistani physician, Dr. Shakil Afridi, to collect DNA samples to track down Osama bin Laden under the guise of a polio vaccination effort.¹⁰ Subsequently, militant leaders in Pakistan enforced a ban on vaccinations in North and South Waziristan, limiting access to an estimated 260,000 children.¹¹ "As long as drone strikes are not stopped in Waziristan there will be a ban on administering polio jobs... Polio campaigns are also used to spy for America against the Mujahideen (holy warriors), one example of which is Dr. Shakil Afridi," a militant group said in a statement.¹²

Further momentum against the polio vaccination drives was gathered when Islamic militant leaders, such as Maulana Fazlullah, now the chief of a militant group allied to the Pakistani Taliban, stated that to accept the polio vaccine would be considered haram (forbidden) in Islam.¹³ Fazlullah further claimed that those using the vaccine and submitting themselves to impotency were infidels of Islam.¹³ In addition to militant leaders, even the general Pakistani hoi polloi raised doubts against the polio vaccine. Some Pakistanis inquired why the government was visiting door-to-door supplying polio vaccines when there were no equivalent free programs for other chronic diseases.¹³

Due to the misconceptions that the vaccination efforts are either a Western plan of spying on Pakistan or that the vaccines induce sterilization, Pakistani militants have resulted to terrorism in an attempt to halt polio vaccination drives.⁹ This terrorism has had a calamitous effect on the vaccination effort; since July 2012, 31 polio vaccination workers have been murdered in terrorist attacks.¹⁴ In the city of Peshawar, which was declared the largest reservoir of polio in the world and has accounted for 90% of all polio cases in Pakistan, a bomb recently exploded on February 17, 2014 at a polio vaccination station. The following day, armed gunmen kidnapped six WHO anti-polio workers.^{15,16}

Despite the tremendous momentum toward the eradication of polio, the deliberate attacks on polio workers in Pakistan threatens to reverse decades of progress in the global eradication of the virus. The WHO writes that, "as long as a single child remains infected, children in all countries are at risk of contracting polio. Failure to eradicate polio from these last remaining strongholds could result in as many as 200,000 new cases every year, within ten years, all over the world."²

PAKISTAN'S INGREDIENT TO SUCCESS: THE "SEHAT KA INSAF" MODEL

In the face of a Taliban ban on polio vaccinations, Pakistani health authorities have taken a unique approach to continuing polio vaccination campaigns despite the risk of being targeted by terrorists. Instead of focusing on a polio-specific drive, a new Pakistani model campaign, known as "Sehat Ka Insaf," aims to be an all-inclusive method for treating all types of preventable diseases in order to use a blanket method of administering the polio vaccine.

The "Sehat Ka Insaf" campaign was developed by the government of a province in Pakistan known as Khyber-Pakhtunkhwa.¹³ The campaign began on February 2, 2014, and it will take place in Peshawar for twelve Sundays.¹³ Depending on its success rate, the "Sehat Ka Insaf" model may be extended to other districts. Every Sunday, the campaign lasts from 9am to 3pm and will continue

until April 20, 2014.¹³ The projected expenditure of the entire campaign is Rs.124 million and is being paid by the World Health Organization and UNICEF.¹⁷

Since militants oppose the polio vaccine only, the "Sehat Ka Insaf" campaign offers eight other vaccines to preventable diseases including tuberculosis, diphtheria, pertussis, tetanus, hepatitis B, haemophilus influenza, pneumonia and measles.¹³ In addition, the health campaign provides vitamin A drops and hygiene kits, which include soap, toothpaste, toothbrushes and towels.¹³ By expanding the types of vaccines, toiletries and dietary supplements offered, "Sehat Ka Insaf" serves as a protection mechanism to administer polio vaccines without being targeted.

To safeguard against terrorist attacks, the campaign was designed to be completed in a very short period of time, during which motorcycle riding is prohibited, thousands of police officers are put on guard and cellular phone service is suspended.¹⁸ Unlike past polio-specific vaccination drives that mimicked India's strategies, the campaign works under a much briefer window of time to make health workers less vulnerable to a militant attack. Finally, to prevent vaccination refusals, the polio workers travel with religious clerics to convince parents that the vaccinations are not forbidden in Islam.

While previous polio-specific vaccination drives run by the federal government took up to two weeks, the "Sehat Ka Insaf" program achieved a comparable number of successful vaccinations within six hours. Success stories of the campaign are already circulating in Pakistani news reports. Pakistan Today wrote that, "according to the data collected by the KP health department, 362,004 children were vaccinated against polio in 45 union councils of Peshawar in the first round; 455,906 in the second round; 547,093 in the third; 560,881 in the fourth, while 650,405 children were vaccinated in the fifth round of the campaign."¹⁸ Despite the fact that the program is in its beginning stages, over 2.5 million children have been vaccinated against polio during "Sehat Ka Insaf" vaccination days in Peshawar using 12,500 volunteers.¹⁹

The "Sehat Ka Insaf" campaign has not only proven to be successful and efficient, but also realistic. Earlier campaign ideas provided by the Melinda and Bill Gates Foundation proved to be unsuccessful due to polio-specific campaigns that were unrealistic in the face of terrorism.¹⁷ However, "Sehat Ka Insaf" has successfully managed to combat terrorism through a blanket mechanism of providing a broad spectrum of vaccines and supplements and through specific security measures to prevent violence. The Khyber Pakhtunkhwa province's Minister for Information, Shah Farman, said, "the reality is that this programme has been lauded internationally while other provinces are now trying to replicate Sehat Ka Insaf."¹⁷ The reason why India's proven strategies did not work for Pakistan is because India's model was based on aggressive long-term monitoring. However, in the face of terrorism, Pakistan needed a more personalized strategy that would allow health care workers to quickly get in and out of high-risk environments. Thus, by proving to be successful, efficient and realistic, the "Sehat Ka Insaf" model is a promising way of combating the final reservoirs of polio in terror-ridden Pakistan.

CONCLUSION

As of April 7, 2014, Pakistani officials have extended the "Sehat Ka Insaf" model to other districts in Pakistan, such as Mardan, Charsadda and Swabi.²⁰ However, a major concern is that, as the Peshawar provincial for Health, Shahram Tarakai, stated, after three more rounds of the campaign in Mardan, Charsadda and Swabi and after the culmination in Peshawar on April 20, 2014, the government will revert back to previous polio-specific campaigns.²⁰ Shahram Tarakai stated, "this programme was started to tackle a spiral in polio cases, I mean the issue of Peshawar being the polio reservoir. We will run routine polio campaigns in Peshawar after the remaining two rounds."²⁰

Contrary to Shahram Tarakai's plans, Pakistan should not, under the present terror-ridden circumstances, revert back to "routine polio campaigns," because health workers would, once again, become vulnerable to attack under the previous polio campaign structure, and targeted attacks on health workers would likely resume.

Considering the successes of the “Sehat Ka Insaf” campaign, Pakistani government and health officials must mass replicate this model and utilize it throughout strongholds of polio-specific terrorism in Pakistan until polio is completely eradicated. In the face of targeted killings, the “Sehat Ka Insaf” campaign presents a brilliant, multifaceted strategy for delivering vaccines in a region of the world gripped by fear of terrorism and distrust of healthcare workers. The campaign provides more than just polio vaccines to circumvent the militant ban on polio vaccines. In addition, it provides a myriad of unique security measures to prevent violence. Most importantly, the campaign has proven to be a model of efficiency, achieving comparable vaccinations in a matter of hours, as opposed to previous campaigns that lasted a couple of weeks.

If modeled properly, mass replications of the “Sehat Ka Insaf” campaign will be the final ingredient to successfully overcome the hurdles that terrorism in Pakistan has created. To fully eradicate polio, Pakistan should not revert back to “routine polio campaigns,” but instead should continue replicating the “Sehat Ka Insaf” model until the finish line.

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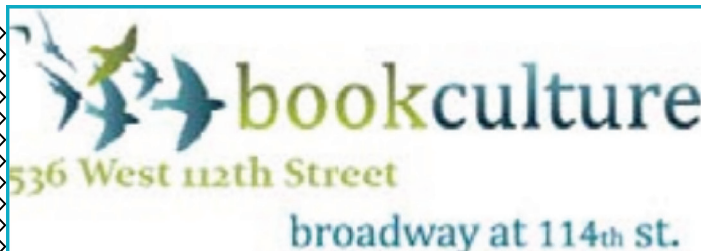
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