Against All Odds

Breaking Through to the Last Child in Afghanistan

When Afghanistan records its last case, it will be a tangible and measurable victory. We have tried so many initiatives here over the past 30 years – and sometimes it is hard to see how far we have come. But when polio is ended, there will be no doubt. -Dr. Abdullahi Yussuf, UNICEF Chief of Field Office in Kandahar

Loading...

he house-to-house polio campaigns that began in 2000 under the Taliban regime had persisted through war and insecurity. Vaccinators had fanned out across the country to reach nomadic tribes, mountain villages, desert communities and even families in the heartland of the anti-government insurgency. Polio drops became synonymous with peace. Days of Peace were arranged to facilitate polio campaigns, as combatants laid down their guns and permitted beleaguered communities a momentary respite from violence.

"I remember how the Taliban gave us a letter permitting vaccinators to pass freely," recalls Dr. Shamsher Ali Khan, Immunization Specialist for UNICEF. "They still believed that they were the first ones to launch the eradication drive – and wherever we went, their fighters were instructed not to disturb us."

With so much support, the polio partners felt optimistic. Polio cases fell from 118 in 2000 to just 11 a year later - and kept dropping.

But Dr Shah Wali Popal, Chief of UNICEF's Polio Team in the endemic southern provinces, remembers a gnawing sense of doubt.

"It seemed too good to be true," he says. "At the time, our (disease) surveillance network was growing but it was not absolutely everywhere. I was worried that maybe we were missing cases - and that the disease would soon return to haunt us."

Dr Popal's fears proved prophetic: cases began to rise in 2005, climbing steadily for the next six years to peak at 80 again in 2011 – an outbreak in the south that set back the programme's hopes.



What was driving polio's return?

The answer lay in the country's remote south – in the poppy fields of Helmand and the secluded villages of Kandahar. Insecurity was climbing in districts where every door was once open – and access to children was dropping away.

"We got more and more calls from vaccinators telling us they not been allowed to enter a place," says Dr Shamsher. "There was a new sense of fear. Rumors started taking a real hold of families, and suddenly we were missing enough children for the poliovirus to circulate."

The polio campaigns were caught in the middle of a rising insurgency that held two countries in its grip. Pakistan, Afghanistan's eastern neighbour, was also battling against anti-government elements spread along their mutual border – a mountainous, region where Pashtun tribes have moved back and forth for centuries with little care for international boundaries.

"You could no longer separate polio transmission in Afghanistan and Pakistan," says Dr Hemant Shukla, WHO Afghanistan's Polio Team Leader. "We saw two very clear epidemiological blocks emerge, spanning both countries – one linking Karachi and Quetta to Afghanistan's south, and one linking Peshawar to Afghanistan's eastern provinces."

The fight for control of territory brought bloodshed back to the most vulnerable villages. Violence and military operations on the Pakistani border brought displaced families fleeing back into Afghanistan – often bringing the virus with them.

And with the arrival of the so-called Islamic State into Eastern Afghanistan, the number of inaccessible children began to climb high enough to sustain local outbreaks. By the end of 2015, **26,000** children were deemed inaccessible in Afghanistan's south, and as many as **73,000** in Nangarhar – a key eastern province – a figure that had quadrupled since late 2014.

At the same time, Afghanistan was experiencing a demographic boom – its 30 million population expected to double by 2030.

When polio eradication started, to reach every child campaigns needed to reach 3 million children under five. By 2010, that number was 7.5 million. Almost all of these children remain desperately vulnerable to polio. Inaccessibility remains the biggest challenge to reaching every last child with the polio vaccine and driving progress toward kicking polio out of the country. With many Afghanistan children affected by stunting, diarrheal episodes, etc. (leaving them too weak to convert the polio vaccine into rapid immunity), as well as low literacy levels, a weak health system, and chronic insecurity, Afghanistan remains one of the world's toughest environments for recruitment, supervision and monitoring.

The race to protect these children has taken Afghanistan to the limits of its capacity. A vast endeavour is boiling down to three core strategies: to reach inaccessible families through patient, persistent community engagement, to tighten the net around repeatedly missed children, and to invest human resources and a relentless commitment to quality immunization activities in the heart of the highest-risk priority districts. Together, these strategies represent our best chance to conquer the odds on polio's most dangerous frontline.

Image credit: ©UNICEF/Claire Hajaj

Tightening the Net in Polio Hotspots

Insecurity has isolated tens of thousands of Afghanistan's children from polio vaccinators. But in accessible areas that are remote, poor, or host the weakest health system structures, almost as many children slip through the net in every polio vaccination campaign.

"We can't underestimate the impact of insecurity on missing children," says WHO's Afghanistan Team Lead, Dr Hemant Shukla. "But we must also be careful not to overestimate it, either. The fact is, children are being missed in areas with relatively good access." Tightening the net around these children has been a key focus of the polio eradication effort in recent months. Human ingenuity has been set against complex tribal dynamics, low education levels and a vast river of people flowing back and forth within the country and across international borders.

Pinpointing missed areas

The first and most important challenge was deciding where to work harder. Afghanistan is a nation of dynamic social and geographical contrasts. Even in the four provinces where polio still survives, no two districts present the same problems.

"We had already identified 96 "low-performance districts" – areas where we believed consistent underperformance was having a big effect on eradication hopes," says Dr Shukla. "But after establishment of the polio Emergency Operation Centers, we decided to narrow that even further."

Based on a combination of epidemiological, social, demographic, security and operational criteria, the programme identified 47 districts which together accounted for more than four out of every five cases over the past seven years. Nineteen of these were deemed "priority one" – the key to ending polio.

"You have to consider just how sparse Afghanistan's population is to understand how powerful a lens we are using," Dr Shukla says. "The number of children living in one of these districts is just a fraction of the number you'd find in 'high-priority' districts of Pakistan or India."

Moving area by area, the programme took a closer look at campaign planning. And one fact immediately leaped out – a critical gap through which hundreds of children were falling.

"We realized that there were villages on the borders of these districts for which no-one was claiming responsibility," remembers Dr Popal of UNICEF Kandahar. "No one was going there and no one was recording them on the polio campaign microplan. They were literally off the map."

Dr Popal and his colleagues found two reasons why villages were not recorded. In some cases, vaccinators 'officially' responsible for a border village were unable to cover it in reality – it was too far, too difficult to reach, or was actually in a bordering district or country. And in other cases, there had been no clear administrative decision on where a village belonged.

"There was a village on the border of Farah province that is not accessible to Farah, for example," Dr Popal explains. "So we asked vaccinators from Nimroz Province to cover it. It was never vaccinated before, but now the vaccine is getting there regularly." "We realized that there were villages on the borders of these districts for which no-one was claiming responsibility ... they were literally off the map." – Dr. Shah Wali Popal

Going back to every door

The "microplan revision" strategy brought thousands of missed children back into the polio campaigns. However, the majority of Afghanistan's children missed in vaccination campaigns missed children were not hiding in unmapped villages.

They were the ones marked on campaign tally sheets as either 'not at home, newborn, sick or sleeping', accounting for more than half (60 per cent) of all missed children in accessible areas. These missed children were supposed to be caught by vaccinators returning to households with recorded missed children at the end of each day.

But something clearly wasn't working. Across Kandahar and Helmand from 2013-2015, more than 70 per cent of children who were missed the first time vaccinators came to the door remained unvaccinated at the end of the campaigns.

"We decided the solution was a 'fifth day revisit strategy', says Dr Shukla. "A traditional three-day campaign would end on Wednesday and vaccinators would do their best to return to missed households each day. Thursday would be a day of rest. And on Friday, the teams would go out to work again, specifically to recover the rest of the missed children."

Friday vaccination re-visits proved especially effective. With Afghanistan's weekends running from Friday-Saturday, this was a day when most families were at home together, and children were more likely to be available. The strategy saw a significant uptick in coverage of "not available" children. Between 2013 and 2015, vaccinators in Kandahar and Helmand were able to cover twice as many children on the "revisit" day as they were during daily catch-ups during the campaign.

In Kandahar City, an additional strategy was added: female social mobilizers were sent out again as a 'B-Team' to missed households and picnic areas – giving families an additional opportunity to

vaccinate missed children.

"Our female social mobilizers were particularly good at addressing "soft refusals" – where the mother just didn't really want to bring the children out of the house," says UNICEF's Melissa Corkum.

A polio transit team at work in Kandahar. Image credit: ©UNICEF/Claire Hajaj

Vaccinating children on the move

On one side, Pakistan is the world's deepest reservoir of polio. Karachi, Quetta and Peshawar are the starting point of a chain of transmission linking Pakistani households to Afghan villages hundreds of

miles away. To stop the virus at the border, every child under 10 years old gets the vaccine as they move from country to country.

"Experiencing a cross-border campaign between Pakistan and Afghanistan is really extraordinary," says Dr. Soghaier in WHO Kandahar. "Imagine you are funneling 5,000 people through a single police checkpoint. People have to get out of their trucks and cross the Friendship Gate on foot. And that is where we have our teams - one Pakistani and one Afghan, facing each other. Both teams have to check the people trying to leave and vaccinate the people trying to come in. They also have to notify the authorities about all children who show signs of paralysis. It's a lesson in cooperation."

Afghanistan and Pakistan's polio teams also make detailed plans to vaccinate the remote villages scattered across the border region, to synchronize their national and regional immunization campaigns and to coordinate on strategy through their Emergency Operations Centres. These strategies are supported by common communications materials found on banners leading up to both sides of the border, and coordination to ensure radio broadcasts that cross borders have mutual messaging.

"The teams help each other," explains Dr. Soghaeir. "For example, our cross-border team in Helmand is actually run by Pakistan's polio operation. And likewise, we helped vaccinate children in six villages in Pakistan's Killa Abdullah – because we had access that they did not."

Dr Maiwand says that polio cooperation has become a flagship initiative between the two countries. "We are talking at a really high level about operations - to synchronize our planning and map very sensitive areas, to divide responsibilities and even help out inside each other's countries where necessary."

The campaign also keeps track of population movement inside Afghanistan -- seasonal movement of tribes, migrant workers and nomads – to find ways of protecting them on the move.

Permanent Transit Teams are a central plank of this strategy, as are special teams put in place during seasons of high population movement. Vaccination booths have been set up to work 365 days per year at checkpoints on district borders, at bus stations and in the markets, while temporary teams visit schools, madrassas, major hospitals and Friday picnic areas.

The campaign has also mapped the route of nomads whose movements follow the seasons, leaving Kabul and the heights in winter and returning to the hills in the summer. Special teams follow them when they arrive – working rapidly to vaccinate them as they pass. In the spring of 2015, for example, a Permanent Transit team vaccinated 11,000 nomadic children on the move in south-east Afghanistan, and in July a tent-to-tent drive covered a further 27,000 where they were camped.

These strategies continue to scale up. Afghanistan's Permanent Transit Teams increased from 61 in January 2015 to 165 permanent vaccination points a year later, vaccinating some 700,000 children per

month - vital drops of protection in an ocean of human movement.

"Experiencing a cross-border campaign between Pakistan and Afghanistan is really extraordinary ... It's a lesson in cooperation." – Dr. Mohamed Soghaier

Banner image provided by ©UNICEF Afghanistan/Celeste Hibbert