The power of belief

Figure 1: ‘A warning from history’: How the polio virus escaped the GPEI

The 2002 - 2005 northern Nigeria epicentre; over 1200 polio cases invaded countries far and wide (either directly or indirectly).

Published originally in the November 2012 Report of the Independent Monitoring Board of the GPEI
Global polio eradication: The precariousness of progress

As 2012 drew to a close, optimism was running high for the Global Polio Eradication Initiative. Polio transmission in India had been interrupted. The three remaining endemic countries (Pakistan, Nigeria, Afghanistan) had made significant programmatic improvements. Some believed that success was imminent; that polio would soon be history.

Within a matter of months, this optimism quickly unwound.

- Targeted killing of polio vaccinators in Pakistan shocked the world and created major operational constraints.
- Polio virus entered Waziristan, a part of Pakistan in which polio vaccination had been – and remains – banned by Taliban commanders.
- Polio operations were severely impaired.
- Nigeria polio virus was exported to Somalia, where it infected a population unprotected against polio because of conflict. This led to an emergency situation in the region.

In another effort to build trust and restart the campaign, Vaccination in Kano finally resumed in July 2004, but substantial damage had already been done. It has taken another decade to rebuild trust and achieve the current progress towards polio eradication.

Importance of vigilance and continuous trust building

Even after the high-level political issue was resolved, distrust and opposition remained widespread among religious leaders and the general public. Greater attention was then paid to local communities, spurring new engagement with religious and traditional leaders, and a greater emphasis on listening to people seeking to clarify the science or ‘explain away’ the rumours. A new focus on interpersonal communication in social mobilisation emerged in Nigeria, as a route to changing people’s attitudes and practices.
Figure 3: Vaccine-hesitant parents and their reasons

Nigeria

- Did not think it was needed (70)
- Did not think the vaccine was safe (23)
- Did not think the vaccine was effective (19)
- Had a bad experience or reaction with previous vaccination (17)
- Had a bad experience with previous vaccinator/health clinic (16)
- Other beliefs/traditional medicine (14)
- Religious reasons (13)
- Someone else told me that the vaccine was not safe (15)
- Someone else told me they/their child had a bad reaction (14)

- Cost (1)
- Not possible to leave other work (at home or other) (23)
- Timing inconvenient (24)
- Too far away (26)
- Vaccine Unavailable (2)

- Already had the vaccine (9)
- Don’t Know/Can’t remember/No reason (81)
- Hospital (1)
- Husain persuaded it (1)
- Misunderstood question (14)

N = 12564
3687 with child 5 years or under

Georgia

- Did not think it was needed (3)
- Did not think the vaccine was safe (11)
- Had a bad experience or reaction with previous vaccination (6)
- Someone else told me that the vaccine was not safe (3)
- Someone else told me they/their child had a bad reaction (3)
- Because of being sick (1)
- Cost (1)
- Had a high temperature (1)
- Timing inconvenient (1)
- Allergic child (1)
- Disabled child (1)
- Don’t Know/Can’t remember/No Reason (2)

N = 1000
474 with child under 15 years*
36 reasons given

*Parents in Georgia were asked if they had children under 15, not 5

UK

- Did not think it was needed (6)
- Did not think the vaccine was effective (11)
- Did not think the vaccine was safe (4)
- Had a bad experience or reaction with previous vaccination (4)
- Had a bad experience with previous vaccinator/health clinic (3)
- Other beliefs/traditional medicine (2)
- Religious reasons (2)
- Someone else told me that the vaccine was not safe (3)
- Someone else told me they/their child had a bad reaction (2)
- Not possible to leave other work (at home or other) (5)
- Timing inconvenient (12)
- Too far away (4)
- Don’t Know/Can’t remember/No Reason (43)

N = 2609
709 with child 5 years or under

105 reasons given

196 with child 5 years or under
73 reasons given

Vaccine-hesitant parents and their reasons

Nigeria

N = 12554

3687 with child 5 years or under

708 hesitant

308 hesitations

Did not think it was needed (70)
- Did not think the vaccine was safe (23)
- Did not think vaccine was effective (19)
- Had a bad experience or reaction with previous vaccination (17)
- Had a bad experience with previous vaccinator/health clinic (18)
- Other beliefs / traditional medicine (14)
- Religious reasons (15)
- Someone else told me that the vaccine was not safe (15)
- Someone else told me they / their child had a bad reaction (14)

Cost (1)
- Not possible to leave other work (at home or other) (23)
- Timing inconvenient (28)
- Too far away (26)
- Vaccine Unavailable (2)

Already had the vaccine (2)
- Don’t Know/Can’t remember/No reason (81)
- Hospital (1)
- Husband forbade it (2)
- Misunderstood question (14)

385 reasons given

## The State of Vaccine Confidence

### Table 2: Nigeria state-level analysis of prevalence of hesitancy and refusal

<table>
<thead>
<tr>
<th>State</th>
<th>With child &lt;5 years</th>
<th>Hesitants</th>
<th>Hesitants as % age of child &lt;5 yrs</th>
<th>Refusers</th>
<th>Refusers as % of hesitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enugu</td>
<td>841</td>
<td>44</td>
<td>5.23%</td>
<td>13</td>
<td>29.55%</td>
</tr>
<tr>
<td>Jigawa</td>
<td>637</td>
<td>101</td>
<td>15.86%</td>
<td>10</td>
<td>9.90%</td>
</tr>
<tr>
<td>Kaduna</td>
<td>701</td>
<td>96</td>
<td>13.69%</td>
<td>16</td>
<td>16.67%</td>
</tr>
<tr>
<td>Kano</td>
<td>604</td>
<td>31</td>
<td>5.13%</td>
<td>23</td>
<td>74.19%</td>
</tr>
<tr>
<td>Lagos</td>
<td>904</td>
<td>36</td>
<td>3.98%</td>
<td>8</td>
<td>22.22%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3687</strong></td>
<td><strong>308</strong></td>
<td><strong>8.35%</strong></td>
<td><strong>70</strong></td>
<td><strong>22.73%</strong></td>
</tr>
</tbody>
</table>

Hesitancy is given in absolute numbers and as a proportion of respondents with children under five years of age. Refusal is given in absolute numbers and as a proportion of hesitants.

Fear and distrust linger

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Forbes

Anti-Vaxx And Ebola Superstition Endanger Public

A devastating Ebola outbreak is ravaging West African countries like Liberia, Sierra Leone and Guinea, with reports of deaths soaring past 1,000. Efforts to control the outbreak are hampered by unfounded fear and suspicion of modern medicine, reliance on herbal medicine, and even belief in witchcraft.

But misinformation, conspiracies, and superstition around western medicine are not only endangering lives in Africa.
Public, provider and political confidence is needed

Ebola outbreak: Guinea health team killed

Polio workers killed in Pakistan attack

Assailants shot dead four vaccinators in Baluchistan province, forcing authorities to halt immunisation drive.
Fear and distrust thrive in times of uncertainty

The human factor

Cheikh Niang tells Fiona Fleck why listening to people and helping them adapt their customs are essential in the fight against Ebola in western Africa.

I found buckets of chlorine for hand sanitization in the places, doorways etc., that were controlled by men, not women. Women had not been consulted on their position but given their caring role for the sick, they were particularly vulnerable to infection.

Resistance is a belief and it is always hidden.

Bull World Health Organ 2015;93:72–73
Local ownership needed

“MSF made a big mistake. We advocated for an increase in beds for too long, and everyone listened to MSF. ...Instead of asking for more beds we should have asked for more sensitization activities”

MSF’s Ebola emergency coordinator in Guinea

Grand Imam of Guinea Taking New Role as Ebola Messenger
The world’s polio paralysed children in 2014: four out of five are Pakistani

**Pakistan**

- FATA
- Peshawar
- Bannu
- Karachi

**Rest of the World**

- Afghanistan
- Equatorial Guinea
- Cameroon
- Nigeria
- Syria
- Ethiopia
- Iraq

Number of cases 1 January - 30 April 2014

- Pakistan Polio Virus
- Nigeria Polio Virus
Building confidence: Support the willing

What must be done about the killings of Pakistani healthcare workers?

It's time to stop trying to accommodate those who spread fear and terror

Zulfiqar Bhutta

support the silent majority in Pakistan who want to see progress and improvements in public health programmes. Ordinary Pakistanis are fighting for survival in a spiral of incessant energy crises, food price increases, and political insecurity
The State of Vaccine Confidence

Key recommendations

- When introducing a new vaccine, think beyond the vaccine and the vaccination to consider the contextual historical as well as current societal and political factors that could
- Vaccine confidence is not just about vaccines – confidence in and by providers and political leaders is key.
- Health science alone cannot achieve immunisation goals - political and social scientists are needed along with risk and decision-making experts.
- Confidence building within the health sector itself is important - providers need to feel confident in the safety

Sometimes the solution lies outside the vaccination programme.

- When countering a negative rumour or conspiracy theory, consider the “fertile ground” factors that make the rumour popular in the first place. Sometimes changing delivery strategies, or actors can dispel rumours, which are just the face of other underlying issues.
- Religious figures can be strong allies for immunisation programmes, as they are invested in the well-being of their followers. When excluded, religious leaders can also become barriers to public confidence in vaccines. Do not dismiss public concerns just because they are based on faith instead of
- Never underestimate the importance of listening and public engagement. This will take different forms in different settings, but is universally vital. The listening and engagement process needs to start from the planning stages and throughout implementation of vaccination programmes. Sentiments can, and do, change. Listening and engagement needs to be ongoing.
- Trust is built over time, brick by brick, from individual acts of goodwill. It requires genuine care for and accountability to the general public. The task that stands before public health leaders is to listen to their publics, hear their concerns, and take them seriously.


**Measuring Vaccine Confidence: No single metric tells the story**

This figure illustrates the various measurement approaches available to researchers investigating vaccine confidence, the ways different data sources can be used to understand the phenomenon of vaccine confidence. Surveys and media tracking can provide “fast data,” near-real-time estimates of public perceptions of vaccines, which can be analyzed to understand how to engage the public.

Qualitative and epidemiological research, meanwhile, provides “slow data,” which takes longer to collect, but can provide deeper insights into the predictors of vaccine hesitancy, the social phenomena that can help or hinder vaccination campaigns, and, in particular, long-term contextual factors that create “fertile ground” for a crisis of confidence. Both fast and slow data can also help identify “promoters,” or factors that can prompt a crisis of confidence, especially “fertile ground” conditions are present.

Finally, systematic reviews can help synthesize findings from multiple studies across different disciplines, providing researchers and policy-makers with practical wisdom and further issues to study in vaccine confidence.

**Figure 1: Fast and slow data monitoring cycle**

Source: Vaccine Confidence Project. 2015. The State of Vaccine Confidence 2015