



HARVARD  
School of Public Health

HSPH/HORP/UNICEF Collaboration for Polling

**Knowledge, Attitudes and Practices (KAPs) Polls  
in Pakistan and Nigeria**

**SUMMARY OF PRELIMINARY FINDINGS**

JULY 2014

## **BACKGROUND**

As part of a collaboration between Harvard Opinion Research Program (HORP) at Harvard School of Public Health (HSPH) and UNICEF, researchers at HSPH conducted a series of polls about polio vaccine among parents and other caregivers of children under age 5 in select parts of Pakistan and Nigeria that are at greatest risk for polio transmission.

In Pakistan, the poll included high-risk agencies or districts within four provinces: the Federally Administered Tribal Areas (FATA), which has higher levels of conflict (“higher conflict”), as well as in the “lower conflict” provinces of Sindh, Balochistan, and Khyber Pakhtunkhwa (KP). In Nigeria, the poll included six high-risk states with similar classifications: Borno (“higher conflict”) as well as Kano, Katsina, Sokoto, Bauchi, and Zamfara (“lower conflict”). At the end of this document, there is a methodology summary that includes details about sampling locations.

As the global polio eradication effort moves closer to reaching the goal to end polio, these polls are part of a global research initiative to understand and respond to parents’ views and experiences receiving polio vaccine. These countries are critical to stopping transmission, as Pakistan and Nigeria are two of the remaining three countries where polio is endemic. New insights from these countries will help the different programs respond to parents’ concerns and demands, in an effort to bring polio vaccine to the last remaining children who are critical for global eradication.

## PRELIMINARY FINDINGS

### **Demand for OPV is High in Pakistan and Nigeria, Even in Some Higher-Conflict Areas**

Among parents in Pakistan and Nigeria who said polio workers came to their door during the last vaccination campaign, nearly all said their children received oral polio vaccine (OPV). In Pakistan, among parents who said polio workers came the last round of vaccinations, 99% of parents in the lower conflict areas said their children received the vaccine; in FATA, this figure is 95%. Among parents in Nigeria who said polio workers came to their home in the last round, 96% in the lower conflict areas accepted the vaccine. In Borno, this figure is not quite as high, at 85%.

High parental support for OPV was also demonstrated through additional metrics in the poll. For example, most parents in Pakistan and Nigeria affirmed that they support vaccination efforts in their own neighborhoods, saying they think these efforts are a good idea (“very good” or “somewhat good”). This was true for 86% of parents in FATA and 98% of parents in the lower-conflict areas of Pakistan. Similarly, 88% and 96% of parents in Borno and the lower-conflict areas in Nigeria respectively said OPV vaccination for their children is a good idea.

### **In Pakistan and Nigeria, Parents’ Misperceptions Could Erode Demand in Future**

Although parental demand has reached very high levels, poll results suggest there are some misperceptions about polio and OPV that could erode demand in the future, if not addressed. For example, a sizable share of parents in Borno (37%) as well as parents in lower-conflict areas of Nigeria (24%) and Pakistan (30%) believe that the paralysis from polio would be *curable* if their child got sick. Further, across both countries, between a fifth and a third of parents were not aware that OPV must be taken every time it is offered to maximize protection against the disease (37% in FATA, 19% in lower-conflict areas of Pakistan, 35% in Borno, and 29% in lower-conflict areas of Nigeria).

### **Parental Trust Faces Limits in Pakistan and Nigeria, Especially in Higher-Conflict Areas**

The poll reviewed several metrics to assess parental trust in the oral polio vaccine, the healthworkers who came to their door during campaigns, and the health system responsible for delivering polio campaigns. Though few parents had explicitly negative views of the vaccinators who came to their door, poll results in Pakistan and Nigeria reveal important limits on parental trust in this key aspect of vaccination efforts, particularly in higher-conflict areas.

For example, in lower-conflict areas of Pakistan, six in ten parents (61%) said they trust vaccinators who came to their home during the last campaign “a great deal,” and far fewer (26%) said the same in FATA. Similarly, two-thirds of parents in the lower-conflict areas of Nigeria (70%) say they trust the vaccinators “a great deal” while less than half of parents in Borno (48%) said the same. Part of the difference may be explained by the fact that fewer parents in these higher-conflict areas were able to evaluate vaccinators because vaccinators did not come to their home, they did not see the vaccinators personally or they were unaware of polio all together. Nonetheless, since the parents who could not evaluate the vaccinators are less engaged in vaccination efforts, the marked differences between the areas raises a concern.

Limits in trust also extend to the vaccine itself, particularly in FATA. Polling results show that nearly half of parents in FATA (48%) and Borno (46%) said they had heard rumors about the vaccine, including for example, the false rumor that the vaccine causes sterility in boys or girls. In Borno, far fewer (11%) believed there was at least some truth in rumors they heard (said rumors were completely true, mostly true, or mostly false, but not completely false); however, a third of parents in FATA (33%) felt the same.

## **Lower OPV Coverage in Higher Conflict Areas of Pakistan and Nigeria Due to Attitudinal, Security and Operational Challenges**

In lower-conflict parts of Pakistan and Nigeria, 99% and 92% of parents respectively confirmed their children received OPV in the most recent vaccination campaign. The polls show coverage to be significantly lower than this in FATA (70% of parents) and Borno (67% of parents). Inaccessibility and security play a critical role for lower coverage, suggested by the finding that fifteen percent of parents in FATA and 19% of parents in Borno said vaccinators did not come or they don't know if vaccinators came during the last vaccination campaign. The poll also provides important data about additional reasons children could be missed, even when access is possible. Missed children in the higher-conflict areas of each country included those with parents who:

- have never heard of polio (11% in FATA; 3% in Borno)
- said that vaccinators came during the last vaccination campaign but their child did not receive OPV or they do not know if their child received OPV (3% in FATA; 12% in Borno).

Notably very few parents suggested that the reason that their child did not get the vaccine was because of concerns about vaccination (1% in FATA and 2% in Borno). Additional reasons parents provided included the ideas that, when vaccinators came, the child was not home (<.5% in FATA and 6% in Borno) or the child was sick or sleeping (<.5% in FATA and 1% in Borno).

### **Poll Suggests New Directions for Supporting Programs in Areas Where OPV Coverage is Lower**

In all places where coverage is lower, vaccination efforts may build trust with communities by offering additional services requested by the community in addition to OPV. When asked about the most critical concerns they would like their local governments to address, "clean water" was among the top requests for parents in Borno (49%) and FATA (59%). Polio programs may consider this as a platform for more broadly supporting children's health and opening doors to delivering broader health services in these challenging environments.

## METHODOLOGY SUMMARY

Design of the poll and analysis is conducted by the Harvard Opinion Research Program at Harvard School of Public Health.

Project staff at HSPH: Gillian K. SteelFisher, PhD, Research Scientist and Deputy Director of HORP; Robert J. Blendon, Professor of Health Policy and Political Analysis and Executive Director of HORP; and Amanda Brulé, Research Assistant.

InterMedia (Washington, D.C.), with Oxford Research International (London, UK), was responsible for implementation methodology, training, and oversight, and a local firm in each country was responsible for data collection. Statistical analyses were conducted primarily by SSRS/ICR (Media, PA). Governments in each country and their partner UNICEF provided expertise in program operations and communications efforts.

These polls are each based on in-person interviews with a random sample of caregivers of children under 5 years of age in high-risk areas of each country, as outlined below. Caregivers were primarily parents, though they also included other adult members of the household, such as aunts or uncles. For ease of reference, all caregivers are referred to as “parents” in this summary.

Geographies selected for inclusion were based on areas at highest risk for polio outbreaks, as defined by WHO, UNICEF and Government partners, as well as feasibility assessments conducted by UNICEF and the local implementing partner in each country. Higher-conflict and lower-conflict geographies were classified as such for this analysis based on the United Nations Department for Safety and Security (UNDSS) Security Level System. Geographies that received a rating of "High" or "Extreme" in areas of "Terrorism" and "Armed Conflict" were considered to be higher-conflict while geographies that received lower ratings in both metrics were considered lower-conflict areas.

The poll in Pakistan included 3,396 caregivers in the high-risk union councils of each of the following districts and sub-districts, November 8-December 23, 2013. The margin of error for the total sample is +/-2.2 percentage points at the 95% confidence level. Interviews were conducted in Pashto and Urdu. The Pakistan Institute of Public Opinion (PIPO) was responsible for data collection.

<i>Province</i>	<i>Districts/Sub-Districts</i>	<i>Sample Size</i>
Balochistan	Quetta	400
	Pishin	200
	Killa Abdullah	200
Khyber Pakhtunkhwa (KP)	Charsada	200
	Mardan	200
	Peshawar	399
	Lakki Marwat	200
	Nowshera	200
FATA	Bajour	200
	Khyber	200
	Kurram	200
	Mohmand	198
	Orakzai	199
Sindh	Karachi Gadap	400
<b>Total</b>		<b>3,396</b>

The poll in Nigeria included 2,629 caregivers in each of the following states, February 3 to March 27, 2014. The margin of error for the total sample is +/-2.3 percentage points at the 95% confidence level. Interviews were conducted in Hausa and English. Decision Support Consulting Africa (Lagos, Nigeria) was responsible for data collection.

<i>State</i>	<i>Sample Size</i>
Borno	388
Kano	507
Katsina	412
Sokoto	562
Bauchi	532
Zamfara	230
<b>Total</b>	<b>2629</b>

Security concerns were present in each of the countries and shaped the required methodology as well as interviewer access to certain geographies. Please note that in Pakistan’s FATA, security concerns prevented interviewers from conducting interviews in North and South Waziristan. Further, they necessitated that only male interviewers were able to conduct interviews in the rest of FATA and thus only male respondents were included in the sample. Separate analyses comparing the responses of men and women in other provinces suggests there are few differences between male and female opinions and experiences with regard to polio vaccination, thus suggesting that comparisons across geographies are still meaningful. In Nigeria, on-going security threats in some areas of each state, and particularly Borno, limited the areas where any interviewers could complete interviews. Thus, the sample in these countries should be considered to cover the “research-accessible” within the relevant areas.

Data aggregated across districts (in Pakistan) or states (in Nigeria) are weighted to total population size as a proxy for caregiver population size, using available census data and projections.

Possible sources of non-sampling error include non-response bias (which may be differential across groups), as well as question wording and ordering effects. To compensate for non-response biases, sample data are weighted by gender and age of caregivers (using data from interviewers’ household rosters) and by sex of reference child discussed in the interview (using biological probability of 50% boys and 50% girls). Other techniques, including random selection of households, respondents within the household and reference child for the interview are used to ensure that the sample is representative.