

SOCIAL AND BEHAVIOURAL INSIGHTS COVID-19 DATA COLLECTION TOOL FOR AFRICA

CASE STUDY: PILOT IMPLEMENTATION IN NIGERIA AND ZAMBIA



BACKGROUND

An effective response to the coronavirus (COVID-19) pandemic requires the understanding and use of social and behavioural data alongside biomedical data. Recognizing this need, the Behavioural Insights and Sciences Unit of the World Health Organization (WHO) and the WHO Regional Office for Africa (AFRO) designed a survey tool tailored to Africa, to make it easier for countries to collect context-specific social and behavioural data. The objective was to inform the COVID-19 response at the country level while also allowing regional comparisons. This case study describes how the tool was adapted and used in a pilot study in Nigeria and Zambia and complements the WHO guidance on how to use the tool.¹

PILOTS IN NIGERIA AND ZAMBIA

With the support of an in-country implementing partner – BBC Media Action – Nigeria and Zambia piloted the tool in March 2021, to collect data on people’s knowledge, attitudes and behaviours towards COVID-19. The aim was to supplement existing knowledge about COVID-19 in each country, and to inform the local response to COVID-19.

This case study details how the tool was adapted by the two countries and the lessons learned from implementation of the tool. The lessons will be useful for those implementing the tool in different contexts; for example, WHO country teams, nongovernmental organizations (NGOs) and national health authorities.

1. <https://www.afro.who.int/publications/social-and-behavioural-insights-covid-19-data-collection-tool-africa>

APPROACH

Collection and use of the data in Nigeria and Zambia followed six steps. This document outlines the actions taken and the lessons learned at each step. The description of most of the steps concludes with a box summarizing tips for implementing that step.



1. PLANNING AND ENGAGEMENT

The project team set up the pilot studies and undertook planning and engagement activities throughout the project. The project team comprised a WHO focal point and two researchers from the implementing partner in each country, supported by a 'central methods team' staffed by the implementing partner, and WHO technical staff from AFRO and WHO headquarters who provided oversight and guidance.

1.1 Engaging stakeholders.

At the start of the project in Nigeria and Zambia, members of the COVID-19 response teams (the response "pillars") and other critical stakeholders were invited to attend the initial project meetings, to contribute to the planning and design of the data collection. The aim was to ensure that the project was aligned with the goals of the local COVID-19 response teams, and to emphasize the value of the social and behavioural data to be collected. This step not only provided early engagement, it also established a channel of communication between the project team and the local response teams.

An example of how the response teams influenced the design of the project was the suggestion to link the thematic modules in the tool directly to the needs of the response pillars. This resulted in the creation of modules relating to "case management" and "contact tracing" within the tool.

1.2 Designing the tool and drafting the protocol.

When drafting the research protocol, the project team needed to define all context-specific aspects of the research, including the sampling strategy, sample size and channels used to recruit participants. For example, the initial plan in Zambia was to conduct 80% of surveys by phone and 20% through face-to-face surveys. However, increasing cases due to new variants made face-to-face contact challenging; hence, ultimately, only 5% of the questionnaires were completed face-to-face. This illustrates the importance of being flexible when conducting research during a pandemic. In Nigeria, the project team met the goal of interviewing 80% of people by phone and 20% face-to-face.

1.3 Securing ethics approval.

It is essential to obtain ethics clearance when collecting data from a population, to ensure the protection and rights of the participants, and the transparency of the study. The study protocol (including the method, consent forms and research instruments) was submitted to local and WHO ethics review committees in late 2020. WHO global ethics approval was granted in December 2020. In Zambia, the country's National Health Research Ethics Board granted ethics approval in January 2021, five weeks after submission of the request. In Nigeria, the National Health Research Ethics Committee granted approval four weeks after submission.

Those wanting to use the tool in other countries must obtain ethics approval at the country level from the relevant local body

1.4 Recruiting researchers.

The implementing partner recruited field teams to implement the questionnaire in both countries. About 40 freelance researchers (Nigeria) and community journalists (Zambia) – all of whom had previously been trained in data collection and qualitative research – were hired to conduct the survey.

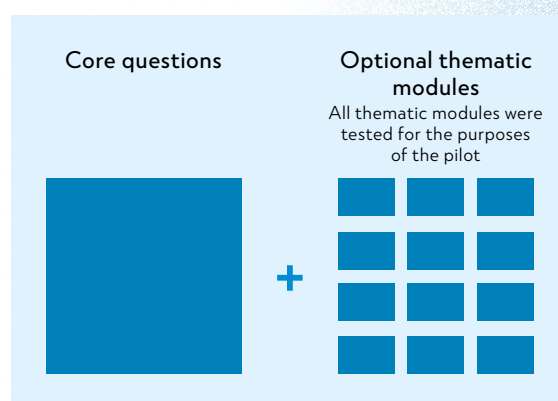


TIPS FOR PLANNING THE STUDY

- Engage the local response team and, if necessary, other stakeholders to ensure buy-in and relevance of the data collected. Allow time for planning and collaboration, to establish a channel of communication with the team.
- Consider the time needed to obtain ethics clearance, and to recruit and train data collectors on the use of the tool. For example, in the two pilot studies, despite regular meetings and the availability of existing networks of data collectors, it took 2-3 weeks to recruit and contract collectors and start the fieldwork.
- Become familiar with the ethics approvals required and the approximate timelines. This is particularly important during the pandemic because timelines and procedures may have changed.

2. QUANTITATIVE MODULE: THE QUESTIONNAIRE

The questionnaire has two parts: a core set of questions designed to capture an overview of the pandemic, and a set of optional thematic modules focused on specific issues (e.g. mask wearing). The pilots in Nigeria and Zambia confirmed that only some of the thematic modules should be used, to keep the survey length manageable (i.e. project teams should prioritize based on local needs).



2.1 Contextualizing the tool.

Adapting the questionnaire for each country ensured that questions were meaningful to participants and responses were relevant to the local context. The questionnaire was contextualized in three ways:

1. The country teams reviewed the tool, highlighting concerns and recommending changes to the wording and topics covered. Questions added in response to this feedback related to the new variant of COVID-19, the use of facemasks, how religious practices affected people's response to national preventive measures and perspectives on vaccination – issues that were critical at the time of data collection.
2. Thirty questions that were thought to be sensitive or potentially ambiguous were cognitively tested with 10 people in each country (5 women and 5 men from varied age groups and socioeconomic backgrounds). In response to this testing, country specific "myths" about the virus (e.g. coronavirus cannot survive in a hot climate) were added and the wording was finetuned, with changes to terminology and the amendment of unfamiliar phrases (e.g. "1 to 1.5 m distancing" was changed to "the length of one arm").
3. Finally, the revised tool was tested with 40 people for duration and flow. It was found that the questionnaire was too long, and that people were struggling to complete the call on their mobile phones in a single sitting. Rather than removing topics, the length was reduced by:
 - rewording long questions (especially some attitude statements) to make them shorter;
 - combining questions focused on similar topics;
 - creating open-ended questions from questions that previously involved the researcher reading text;
 - changing five-point scales into "agree or disagree" statements; and
 - testing no more than two optional thematic modules on each respondent.

After modification, the duration reduced from 120 minutes to under 45 minutes during testing. This is still long for a phone interview but was considered acceptable for a survey of this nature. Over time, the average survey length dropped further to less than 40 minutes.

The final version of the tool was translated into four languages in Nigeria (Hausa, Igbo, Pidgin and Yoruba) and into five of the seven official languages in Zambia (Nyanja, Bemba, Tonga, Kaonde and Lozi). The tool was then scripted into the interviewing software.

2.2 Training the data collectors

A remote two-day training session was held for the data collectors in each country. The training covered administering the questionnaire, addressing potential issues and respecting COVID-19 protection measures. After each session, groups were created on a messaging application for all data collectors and field managers, to help in monitoring, addressing issues and providing regular updates. Each data collector received mobile phone credit.



TIPS FOR FIELDWORK PREPARATION

- During training sessions for data collectors, ensure that the digital version of the questionnaire (preferably both online and offline versions) is tested, to catch any problems (e.g. software updates etc) before the start of the fieldwork.
- Before the fieldwork the project team should define a strategy for likely situations that data collectors may encounter during the survey (e.g. what should happen if a respondent does not pick up after a fixed number of call backs).

3. DATA COLLECTION

Thanks to flexibility in the approach, adequate training of the data collectors and rigorous planning, the data collection in Nigeria and Zambia was efficient and safe. Minor issues arose, but data collectors were able to appraise and resolve them.

3.1 Conducting the interviews

Data were collected over 9 days in Nigeria and 11 days in Zambia, in February 2021. Daily quotas were set for each data collector and were regularly monitored and adjusted as benchmarks were met. Data collectors generally used their own mobile devices to capture the data through a password-protected survey collection tool.

In Nigeria, each of the 40 data collectors conducted about 25 surveys over 9 days, to give a total of about 1000 interviews. Almost 800 interviews were conducted over the first 5 days, then day 6 was used to pause, assess the quotas and reflect on learnings. Over the final 3 days, the collectors undertook the remaining 200 interviews. In Zambia, because of frequent power cuts, data collectors scheduled calls in advance of the interview date and time, to ensure that respondents could charge their phone batteries ahead of the call (to reduce non-participation).

The phone interviews lasted about 30 minutes on average in Zambia and 37 minutes in Nigeria, with some calls taking longer for reasons common with this mode of data collection (e.g. distractions during the call, respondent fatigue, issues with the language spoken, and whether the interview was conducted by telephone or face-to-face).

Interviewers of the same sex as the participants were used for the data collection; this was important given that one of the optional modules of the questionnaire touches briefly on sensitive subjects. Use of same-sex interviewers was a change made in response to feedback from the testing. At the end of the survey, participants were asked for permission to be contacted, if necessary, for the qualitative study.

3.2 Monitoring and back checks

The implementing partner was in contact with data collectors daily, to rapidly identify and address any issues faced. Despite the testing and planning before the fieldwork, some challenges were encountered (e.g. the need for software updates and delays in access to the airtime credit required to conduct the interviews). Among the respondents, 25% were “back checked” by the implementing partner (i.e. their participation was verified following the interview for quality control purposes). Additionally, a record of completed interviews was maintained.

Challenges faced by data collectors in both countries included:

- hesitation and refusals to participate (e.g. lack of time, uninterested or unwilling, calls not responded to or lack of trust);
- inability to reach respondents despite prescheduled calls;
- incorrect phone or contact details in the database used (e.g. because people relocate or change their phone numbers);
- hesitation about completing the survey because of its length;
- incomplete interviews at the first attempt because of respondents’ other commitments, with interviews having to be completed at a later time or date;
- request for incentives during the interview, despite participants having been informed before the call that no remuneration was foreseen for this project and that the project was benefiting the community by contributing to the pandemic response; and
- interviews taking place in the (late) evening because of respondents’ availability; for example, respondents in the youngest age category (16–24 years) were difficult to reach because some did not own a phone but used their parents’ or guardians’ phones or were unavailable during the day.

Daily problem solving was required to help the data collectors overcome these challenges.



TIPS FOR DATA COLLECTION

- Face-to-face interviews build trust but are not always possible due to COVID-19 measures.
- It is important to plan adequate structured reflection and daily feedback from data collectors, both during and after data collection. This helps to document learnings soon after they occur.
- When building databases for future surveys, it might be useful to collect a second contact number, in case the respondent changes phone number.
- Consider seeking consent from interviewees before the day of the phone interview, to reduce the time required to conduct the survey (consent took 5–10 minutes).
- It is best to keep phone surveys short, especially in contexts where factors such as weak connectivity, power outages and high levels of distrust for cold calls come into play. If the length cannot be reduced, consider splitting the call into two parts (held at separate times or on different days), with the agreement of the respondent.
- Phone surveys can take a toll on interviewers, especially when respondents are difficult to reach (as was experienced in the pilot studies). Consider making the interviewing process easier for data collectors by giving them fewer interviews per day, spreading the phone calls out so that they take breaks between calls, and having a clear plan of what to do should a data collector fall sick.

4. ANALYSIS AND REPORTING

Once fieldwork was complete, the data were checked, cleaned and analysed with the help of software. Timeliness of the data analysis is extremely important. Thus, the main findings (summarized in the box below) were shared in PowerPoint format with local response teams less than one week after completion of data collection. The data were shared with Risk Communication & Community Engagement (RCCE) networks, incident management teams, the Ministry of Health in Zambia, the Nigerian Centre for Disease Control (NCDC), the African RCCE Community of Practice (run by the African CDC) and other stakeholders such as the United Nations Children's Fund

We are "excited about the findings and how they could guide development of the communication strategy for the COVID-19 vaccine."

WHO Zambia focal point

(UNICEF). These groups provided feedback on which areas would benefit from further inquiry through the qualitative module.

Detailed reports of all the findings from both countries are available upon request. The table below summarizes the main findings.



MAIN FINDINGS FROM NIGERIA (March 2021)

- **Impact of the pandemic:** 64% said that lost income and 59% said price hikes of food were the biggest impacts that COVID-19 had on their lives.
- **Recommended behaviours:** 89% self-reported that they had carried out 3 or more of the recommended preventive behaviours.
 - *face masks:* 85% said they had worn a face mask;
 - *physical distancing:* 60% said they had kept a distance; and
 - *handwashing:* 74% said they had washed more often their hands with soap and water.
- **Knowledge of transmission:** 78% reported that the virus is transmitted through coughing, sneezing, spitting or speaking.
- **Belief in myths or misconceptions:** 46% believed at least one myth or misconception.
- **Vaccination:** 32% said they would “probably” (11%) or “definitely” (21%) not get a vaccine.
- **New variants:** 12% had heard of new variants.
- **Contact tracing:** 55% had heard of contact tracing.
- **Health-seeking behaviour:** 6% said they needed to go to a health care facility but did not.



MAIN FINDINGS FROM ZAMBIA (March 2021)

- **Impact of the pandemic:** 63% said price hikes of food has been a major impact and 58% reported lost income as a result of COVID-19.
- **Recommended behaviours:** 90% reported that they had carried out 3 or more of the recommended preventive behaviours:
 - *face masks:* 81% said they had worn a face mask;
 - *physical distancing:* 74% said they had kept a distance; and
 - *handwashing:* 68% said they had washed more often their hands with soap and water.
- **Knowledge of transmission:** 85% knew that the virus is transmitted through coughing, sneezing, spitting or speaking.
- **Belief in myths or misconceptions:** 76% believed at least one myth or misconception.
- **Vaccination:** 56% said they would “probably” (26%) or “definitely” (30%) not get a vaccine.
- **New variants:** 36% had heard of new variants.
- **Contact tracing:** 55% had heard of contact tracing.
- **Health-seeking behaviour:** 49% said they had been to a health facility in the past month, and 16% said they needed to go but did not.

5. QUALITATIVE MODULE

5.1 Defining the topic for the qualitative research

The qualitative research was conducted after the quantitative findings had been shared with local stakeholders. In Zambia, feedback from these discussions determined that reluctance to take the COVID-19 vaccine was the most pressing issue (e.g. one province reported that 91% of people would “probably” or “definitely” not take the vaccine), compounded by misinformation, conspiracy theories on social media and lack of trust. As this decision was being made, the Government of Zambia was in the process of securing the vaccine and planning its roll out, while the WHO RCCE pillar was contributing to the national COVID-19 vaccine communication efforts, making this topic extremely relevant and time critical.

In Nigeria, the project team sought input from the NCDC, and determined that the topic of most interest was better understanding how misconceptions and misinformation in the community affect attitudes towards vaccination.

“We need to work out how to infuse the data into the strategies”
WHO Zambia focal point

5.2 Planning the qualitative component

To support response teams as they planned the vaccine roll out in both countries, in-depth interviews were conducted with participants who had agreed to further contact during the quantitative component. In Nigeria, 12 interviews were planned in three regions of Nigeria – North, South East and South West. However, when participants were approached for an interview, several changed their mind and did not wish to participate. Because of this situation, and a focus on health care workers at the time of the interviews, the project team decided that the final three interviews should be conducted with health care workers, despite

these workers not being included or identified in the initial sampling. The three health care workers interviewed were identified through the existing networks of the WHO team, to minimize delays in conducting the interviews. The last-minute inclusion of health care workers exemplifies the flexibility required to adapt to the evolving needs of local response teams.

In Zambia, ten in-depth interviews were planned. To define questions and the target audience for the qualitative research, a workshop was organized and attended by the project team, WHO vaccine experts, numerous staff from the Zambia WHO team, members of the national RCCE pillar and the UN Communications Crisis Team. Feedback from the workshop was used to refine the qualitative inquiry; for example, to shape the sample (including health care workers and local influencers), and to secure buy-in and interest from the local response team. Fig. 5.1 shows the sampling plan for the 10 interviews, which was designed based on feedback from the workshop.

A discussion guide was developed using enabling techniques (e.g. laddering¹ and projective association²) and previously tested questions, to allow respondents to speak freely and without judgement in the interviews. The discussion was intended to be free flowing, flexible and respondent-led.

1. Laddering is a technique used to encourage respondents to analyse their behaviour and motivations.

2. Projective association is a questioning technique that encourages respondents to attribute their attitudes or beliefs to another person or group.

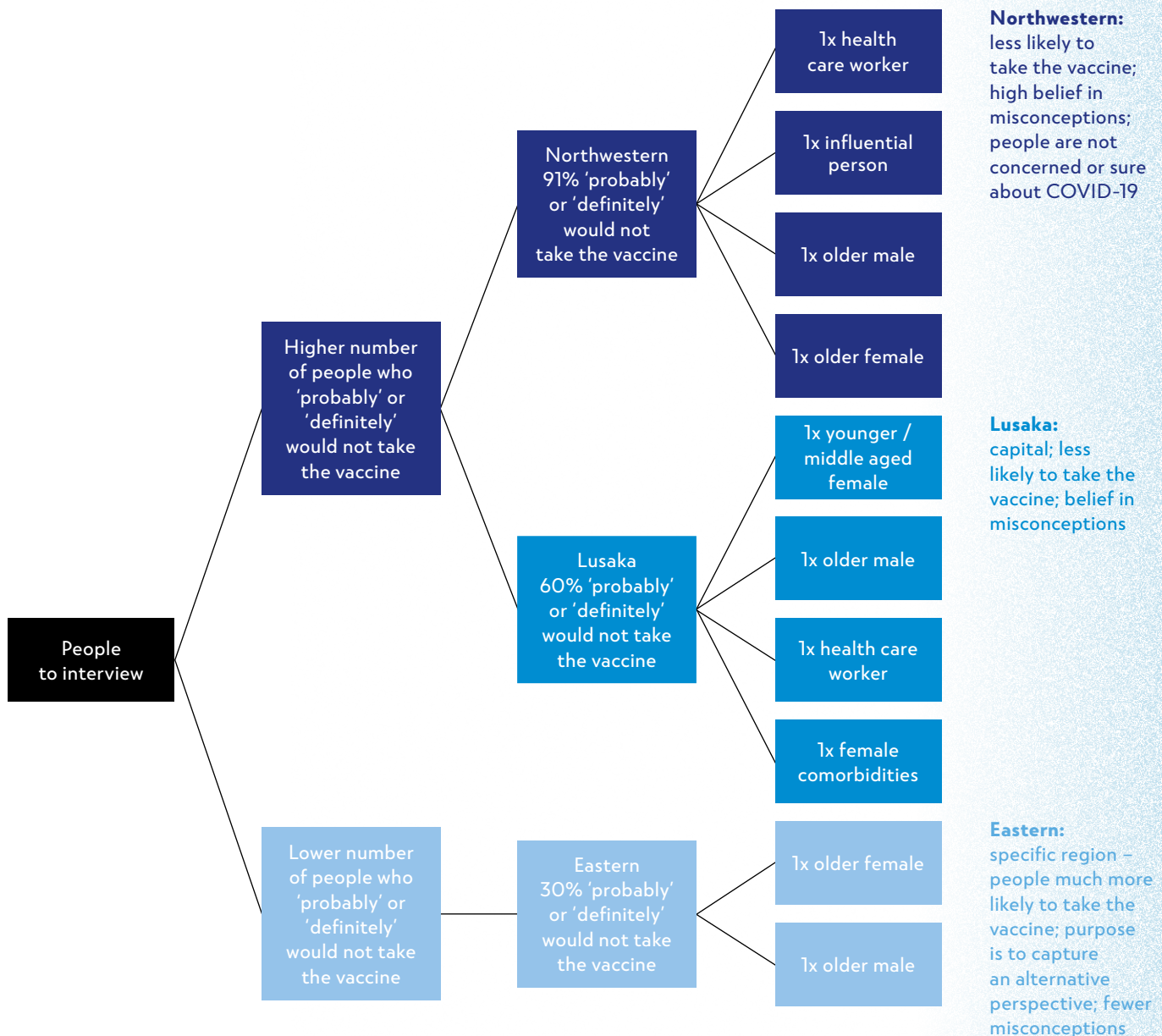


Fig. 5.1. Interview sampling plan for 10 in-depth interviews

5.3 Conducting qualitative inquiry

In Zambia, interviewers included senior researchers from the implementing partner and several freelancers recruited to support local adaptation, including translation into the relevant local languages (e.g. Kaonde and Nyanja). Freelancers were recruited from the pool of community journalists who had previously administered the quantitative module and were familiar with the subject matter. The regions sampled represented areas with high, medium and low vaccine uncertainty. Training on the discussion guide and interview techniques was given before scheduling the interviews, which were conducted from 1 to

8 April 2021, shortly before the launch of the vaccine on 14 April. Interviews were conducted by phone and lasted 60–90 minutes. Selecting participants from the audience database meant that respondents were familiar with the topic, making it easier to build on their feedback from the quantitative survey.

In Nigeria, the implementing partner conducted the interviews over a 7-day period. The interviews ranged from 15 to 50 minutes, with the wide variation being due to different levels of interest among respondents and their prior commitments.

In both countries, the teams faced challenges with airtime, poor connectivity, respondents not completing interviews and having to call back several times to complete interviews. Nevertheless, the interviews yielded rich data and insights, advancing the understanding of the issues faced in the roll out of the vaccine in both countries.



TIPS FOR QUALITATIVE DATA COLLECTION

- Assess the COVID-19 situation and balance the health risks of conducting face-to-face interviews with the benefits of being able to build trust with respondents.
- Train interviewers on any specific techniques to be employed (e.g. laddering).
- Ensure that time for proper investigation of responses is built in and that the respondent is comfortable in giving the time required (although it is best to keep phone interviews short, qualitative research needs time for proper investigation).
- Ensure that interviewers are flexible in terms of being willing to conduct interviews when respondents are available – in this case, calls were scheduled during Easter when respondents were likely to have more free time.
- Plan for several immersion sessions with the data collectors to consider the data and look for insights, linking the findings back to the quantitative data.
- Build in time for analysis and reflection on the qualitative data.

5.4 Analysis and reporting

The interviews were transcribed, translated and analysed thematically using Microsoft Excel; the findings were then incorporated in a final report. The project team considered using coding software; however, the small sample size meant that manual coding was preferable. In addition to the report, **personas** were developed, to combine quantitative and qualitative data and to present the data in a more friendly format. The personas are available upon request.



SAMPLE OF FINDINGS FROM THE QUALITATIVE DATA

- Health care workers said that some of the barriers to vaccination relate to fear of side-effects and lack of trust in the vaccine due to the short time required for vaccine development.
- Participants explained that misconceptions around COVID-19 stem from unverified sources, through discussions and social media. People hesitant to take the vaccine cited several myths circulating in the community.
- Religious leaders were mentioned as important and as being authority figures that people respect; such leaders were perceived as having a role in promoting vaccine uptake among the population.

6. TURNING DATA INTO ACTION

Ensuring that the insights from the project were communicated in a timely manner and used by the local response teams were among the project objectives in both countries. In Zambia, to date, the data have been used to:

- adapt the national COVID-19 message guidance on use of masks, vaccination and the new variant;
- develop the National COVID-19 Vaccine Communication Strategy, to support the implementation of the National COVID-19 Vaccine Deployment Plan;
- develop information, education and communication materials on COVID-19 vaccination (including social media products) for different target audiences;

- develop training modules for orientation of provincial, district and community health promotion officers; and
- supplement the RCCE pillar's *Social Listening Report* – a document that is used by all those involved in RCCE to refine their strategies, based on evidence or feedback from communities.

In Nigeria, to date, the data have been shared with a broad range of stakeholders involved in communication efforts, education and vaccine planning.

Finally, efforts remain ongoing to design and implement targeted interventions based on the data collected to support behaviour change in the response to COVID-19.

CONCLUSIONS

The experiences in Nigeria and Zambia illustrate that the Social and Behavioural Insights COVID-19 Tool can help teams to rapidly gather and incorporate social and behavioural data in the response to COVID-19. The use of a standardized tool that has been adapted to the African region will allow country teams to reduce the time

and resources needed for the planning and collection of social and behavioural data.

In the implementation and fieldwork phase, various challenges can arise. This case study shows how planning, feedback loops, flexibility, open communication and multistakeholder engagement can help to manage such challenges and minimize their impact.

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