

## ZDLH Webinar Q&A: Reflections on Identifying and Reaching Zero-Dose Children

	Question	Presenter Response
All	Can you share your experience on breaking down the barrier to communicate with the parents of ZD children , as they are very reluctant to talk about the reasons for ZD and are not open for qualitative interviews? Also, what tools were used for such assessments? Are any standardized tools available?	<ul> <li>Bangladesh: In this scenario, we employ a paired approach, which involves assigning individuals from the same culture, sharing commonalities such as language and education, from the local community to collect the data. This strategy is aimed at fostering a sense of familiarity and trust between the data collectors and the respondent, thus facilitating a more normalized and comfortable environment for the respondent to share information. By having data collectors who are culturally and linguistically aligned with the community they serve, there is a higher likelihood of effective communication and understanding, which ultimately helped in this regard.</li> <li>Mali: As part of our qualitative evaluation, we conducted interviews with 8 groups of women during the focus group. They demonstrated full cooperation in addressing our inquiries and even suggested strategies for reducing the number of zero-dose children.</li> <li>Nigeria: We have a different experience in Nigeria, the caregivers were open to discussion during the qualitative interviews and that was how we were able to deep dive into the different reasons for the ZD situation. Yes, standardized tools are available for the behavioral and social drivers of immunization that have been developed and validated by WHO and partners (Behavioural and social drivers of vaccination: tools and practical guidance for achieving high uptake).</li> <li>Uganda: In our qualitative interviews with parents and caregivers of ZD children, we found that many were willing to be interviewed. In fact, the majority were presenting</li> </ul>

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		challenges with immunization which were not of their own making and wanted us to help solve the problems. Others were proud to show that despite their children not getting vaccinated, they are very healthy and hence vaccines are useless.
All	While these ZD initiatives target children, would these approaches presented be applicable to identifying ZD adults too?	<ul> <li>Bangladesh: Initially, we analyzed data from secondary sources such as DHIS2, CES, etc., to identify missed communities. Moreover, stakeholders' and health workers' consultation plays a vital role in identifying missed communities. It's important to mention that all secondary information was for children under 24 months of age. Subsequently, we carried out LQAS surveys to confirm the identification of missed communities from secondary data analysis. As there was a lack of information for adult-child immunization in existing secondary data, LQAS surveys can be utilized to identify ZD adults.</li> <li>Nigeria: Yes, most certainly with some modifications to context but community diagnosis, engagement, and empowerment remain vital regardless of the age of the child.</li> <li>Uganda: We can't tell with certainty since we have not interviewed adults. However, health system challenges would equally affect the adults. But social economics could be different.</li> </ul>
Bangladesh	What processes did you follow in designing interventions for the implementation research (IR) in selected ZD areas?	Evidence-based area-specific interventions were designed for the IR in selected ZD areas as the needs of individuals vary depending on geographical location. Firstly, evidence-based interventions are inspected to determine interventions of specific regions. Afterward, with consultation with the EPI stakeholders, preliminary interventions were designed for the study. However, all of these assessments relied on the expertise and insights of key personnel. Hence, the human-centered design (HCD) approach was implemented in study areas to fix area-specific interventions. After the completion of the HCD approach, a co-creation workshop was organized in the presence of all key EPI stakeholders, where their spontaneous participation helped to finalize the interventions for the IR.

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Bangladesh	How can lessons learned from past immunization campaigns and global health initiatives inform strategies for identifying and reaching ZD children in the future?	The identification of missed communities is a continuous process as a community can emerge as a ZD area in the future. In the <u>rapid assessment</u> , we applied the methodology of analyzing existing secondary data sources and utilizing LQAS survey data to confirm the areas as missed communities. Thus, the lesson learned from the rapid assessment can be used in the future to recognize newly emerged missed communities on a half-yearly or annual basis so that ZD children can be reached in a strategic way.
Bangladesh	Could you please explain in detail re: barriers and caregivers business?	While conducting the rapid assessment, the challenges and barriers were identified from both qualitative and quantitative data analysis. The barriers arose from both the supply and demand sides. These barriers can be pointed out as follows:
		<ul> <li>Supply side:</li> <li>Shortage of health assistants (HA) and overload of their work</li> <li>Absence of opportunity to provide interpersonal communication (IPC)</li> <li>Distance to EPI centers and limited transportation</li> <li>Inadequate budget for hard-to-reach (HTR) areas</li> </ul>
		<ul> <li>Demand side:</li> <li>Migration due to environmental damage (river erosion) or cultural reasons (moving from parents' to husband's home)</li> <li>Inappropriate contraindications or concerns about minor side effects</li> <li>Preoccupation with family duties, especially at harvest time</li> <li>Some misconceptions and hesitation</li> </ul>
		In regards to caregivers' business, we observed that working mothers in urban areas missed EPI sessions according to their routine schedule due to their professional commitments and household chores during the daytime. Hence, an intervention of a modified EPI schedule has been designed for urban areas. In this process, evening EPI sessions are being conducted so that working mothers could easily attend the session and vaccinate their child so that the number of ZD children could be reduced.

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Bangladesh	What types of health records and vaccination registers did the CLHs review, and how did they ensure the accuracy and completeness of the data?	According to CES 2019, the vaccination card retention rate is 87.1%. So for individual records, we considered the vaccination card as the primary document. We also reviewed the accuracy of DHIS2 dashboard data on a monthly basis. A study team collected EPI monthly reports from upazila (field) offices to check whether monthly report data were similar to DHIS2 data.
Bangladesh	How are ZD communities identified in a reliable manner? Nigeria used the RESDISSE data. Is this the same for other countries?	In Bangladesh, there is a lack of data sources that could be used to identify the ZD community. We analyzed multiple data sources like CES, DHIS2, and BDHS 2017-18 to identify areas having low coverage of Pental (DTP1) and Penta3 (DTP3) vaccines. However, micro-level data were required to identify the ZD community. All available data sources except DHIS2 data contained district- and division-level information. As DHIS2 data provided sub-district level data, we utilized DHIS2 data. After the identification of the sub-district through analyzing DHIS2 data, a study team visited all the identified areas to verify the quality of the data. Afterward, the team contacted health workers (health assistants, health inspectors, medical officers, etc.) to reach low-coverage unions and clusters of selected areas. We conducted an LQAS survey in those areas to confirm the ZD communities identified through DHIS2 data.
Mali	To what extent have the identified challenges been addressed through pro-equity interventions in Mali? Are there any gaps?	The challenges have been already identified in the previous situational analysis, and FPP includes strategies and pro-equity intervention to systematically identify and reach ZD children. Over 90 activities are scheduled to improve service delivery, demand generation, community engagement, and some focus on gender-related obstacles. The main gap is the strategic approach to overcome economic barriers of poor communities who deprioritized immunization for earning survival money.
Mali	What role do data collection and analysis play in identifying ZD children and designing targeted immunization campaigns?	The collection and analysis of data enable us to identify areas with a high prevalence of ZD and under-vaccinated children; this activity can be done at all levels. <b>Community level:</b> Data from primary supports (vaccination records and tallying) can be collected and data analyzed to understand the situation of dropouts and under-vaccinated children;

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		<b>District and national level:</b> Use of survey and DHIS2 data; the information resulting from the analysis of this data will make it possible to put in place strategies to reach these children.
Mali	Excellent presentation and very insightful findings on the barriers and facilitators of reaching ZD. A bit curious if we can ascertain the magnitude relative to each barrier/facilitator so we can better prioritize to address these barriers or promote the facilitators?	Our rapid assessment (RA) had an exploratory purpose and the rigorous quantification of the magnitude of each of the barriers was left to the subsequent IR. Relying on documentation review and qualitative primary data collection, we aimed to identify the existing barriers in 4 different settings of districts, and to determine common and context-specific barriers. The magnitude of each category of obstacles will be analyzed during the IR.
Mali	Are there any initiatives or attempts to reliably capture information about the vaccination status of nomadic groups such as seasonal or cross border workers, pastoralists, etc.? What are the	Mali implements the REC strategy targeting hard-to-reach and difficult-access populations through two national strategies (advanced and mobile strategy). The implementation research will capture the barriers and facilitators of immunization equity in special populations including nomads, migrants, fishermen, pastoralists, displaced people, desertics, islanders, etc.
	best evidence-based methods to reach these groups?	<b>For the advanced strategy</b> (vaccination of children in villages located less than 15 kilometers from the health center or the vaccinator traveling by motorbike), it is very often implemented and financed by community health centers (CSComs), often with funded support from partners;
		<b>For the mobile strategy</b> (vaccination of children in villages located more than 15 kilometers from the health center or vaccinators traveling by car), it is very often implemented by mobile teams organized by non-governmental organizations in support of the health system.
		Recently, with the support of UNICEF, teams were mobilized and <b>remained on site in the</b>

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		displaced camps for the vaccination of children in difficult to reach areas.
Nigeria	How do you intend to use these findings (barriers and facilitators in Nigeria) into actionable results for a better outcome in reducing the number of ZD children in Nigeria?	We have disseminated these findings during the ongoing Gavi full portfolio planning workshop and also at the floor of the National Emergency Routine Immunization Coordination Centre (NERICC). We intend to further disseminate to immunization stakeholders in the four states in the coming days. These findings would also be published and they would form part of the baseline data for our proposed IR.
Nigeria	How can community engagement and empowerment strategies help improve the identification and vaccination of ZD children, and what examples of successful community-led initiatives exist?	Community engagement and empowerment can lead to increased awareness and trust through improved education, awareness, and more involvement; improved identification and mobilization by community mapping and use of local volunteers; peer-to-peer learning; and also fosters community accountability. One notable example of successful community-led initiatives is the "Reaching Every Last Child" strategy which utilized various community engagement channels like town hall meetings, involvement of religious leaders, and mothers' groups to address vaccine hesitancy and improve immunization coverage. Other examples include the use of CHIPS agents, etc.
Uganda	How do challenges such as lack of accurate data and geographic barriers hinder the identification and vaccination of ZD children?	<ul> <li>Lack of accurate data for example todo vaccine forecasts leads to oversupply and undersupply in some communities thus leading to artificial stock outs.</li> <li>Geographical barriers are a critical hindrances for specific populations for example: <ul> <li>a) Communities living in islands in the middle of lakes don't attract health workers and outreach strategies are extremely expensive and risky without proper boats. They just use canoes which are risky.</li> <li>b) Mountainous zones and poor roads are very difficult to travel to and lead to vehicles breaking down or require too much time which health workers don't have.</li> <li>c) Communities in swampy areas often have very poor roads and again transport challenges for supplies as caregivers.</li> </ul> </li> </ul>
Uganda	How are innovative technologies,	Yes, we have eCHIS (electronic Community Health Information Systems) as well as

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	such as mobile data collection and geographic information systems (GIS), being utilized to improve the identification and tracking of ZD children?	manually registering ZD and under-immunized children. Once identified, health workers can follow up and vaccinate them. GIS helps greatly in improving and creating precise microplanning.
Uganda	What explains the trends in the rising number of ZD children? Can you elaborate on the triangulation between DHIS 2 and IHME?	Many reasons explain the increasing number of ZD but the common ones are health system challenges. Other reasons are related to cultural and traditional beliefs negative to vaccination, which are on the rise. Rumors and misconceptions about vaccines, especially fueled by those related to the Covid-19 vaccine. Lastly social media, with its ever increasing expanded reach. More people than before are exposed to rumors, and misconceptions from anti-vaxxers Data triangulation is basically using different sources of data to guide and draw conclusions, no one source is enough.
Uganda	How did the CLHs prioritize areas or populations with the highest concentration of ZD children for targeted vaccination campaigns, and what strategies were implemented to ensure equitable access to immunization services?	Prioritization of areas was developed together with EPI based on the triangulated data, data from the districts, and presence of equity groups such as island communities, pastoral communities, mountainous communities, border districts, etc. Implementation is yet to happen under the Gavi EAF funding.
Uganda	What is the reason for stock-out of vaccines at sub-national and facility levels?	Lack of accurate figures of the target population (denominator) create supply challenges. Some areas are oversupplied while others are undersupplied. There are also challenges with last mile delivery, which has been very problematic to implement. For example, poor road networks in rural areas often with washed away bridges.