# FROM COVERAGE TO EMPOWERMENT INTEGRATING GENDER IN IMMUNIZATION DEMAND

Promising practices from six countries





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#### Suggested citation:

UNICEF (2022). From coverage to empowerment: Integrating gender in immunization demand. Promising practices from six countries.

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## **Acknowledgements**

This document was produced by the Immunization Unit/Health Section/ UNICEF Headquarters with technical guidance from Deepa Risal Pokharel, the Immunization Demand Team Lead. We would like to acknowledge the lead consultant Ami Sengupta for documenting the case studies and David Mould for editorial oversight.

A special thanks to UNICEF country office SBC Teams in Liberia, Mozambique, Rwanda, Pakistan, Sudan and Yemen for supporting these case studies. These case studies would not have been possible without the contributions of Musu Deshield, Amanda Gbarmo-Ndorbor and Eric K.O. Amankwah (UNICEF Liberia); Aida Mahomed, Mario Lemos, Maltez Mabuie and Rossella Albertini (UNICEF Mozambique); Zara Jamil, Waqas Shafi, and Muqaddisa Mehreen (UNICEF Pakistan); Maksim Fazlitdinov, Redempter Batete and Jean Claude Rukundo (UNICEF Rwanda); Hiba Ali, Islam Ahmed and Sehrish Ali (UNICEF Sudan); and Dennis Chimenya, Fatima Al Agil, Abdullah Alshehari, Arwa Al Awadhi, Ansar Rasheed, and Karmen Al-Kubati (UNICEF Yemen).

We would like to acknowledge the support provided by the SBC and gender teams at UNICEF ESARO, MENA, ROSA, WCARO and New York Headquarters. Alyssa Sharkey, Helena Ballester Bon, Ibrahim Dadari, Johary Randimbivolona, Maha Muna, Natalie Fol, Niklas Danielsson, Shoubo Jalal reviewed earlier drafts and provided feedback. We are also grateful for the valuable inputs provided by Jean Munro and colleagues at GAVI.

### Foreword

I am very pleased to share with you this document with case studies from six countries – Mozambique, Pakistan, Rwanda, Sudan, and Yemen on "Integrating gender into demand" to document good practices in applying gender responsive and transformative approaches to demand interventions being undertaken by UNICEF country offices to support vaccine uptake.

The importance of gender responsive interventions is becoming increasingly recognized as key to successful immunization programmes. Understanding gender barriers and developing people-centred tailored strategies and interventions to address those barriers is critical to addressing equity issues and in improving access to immunization and other health services. IA 2030, GAVI 5.1 guidance and UNICEF Roadmap 2018-2030 all have a strong emphasis on gender.

These examples of good practices on gender integration into demand interventions is part of UNICEF's effort of knowledge sharing, which we hope can support the learning agenda of immunization programmes.

We would like to acknowledge the contribution of UNICEF Country, Regional and HQ office colleagues for their contribution to the development of the case studies. We would also like to thank Ami Sengupta, SBC consultant for documenting and producing these case studies on behalf of UNICEF immunization unit/Health Section/NYHQ.

We hope you will find this resource to be useful and you can apply some of the learnings to influence your immunization demand interventions in different settings.

Enter Follow Tende.

**Dr Ephrem Tekle Lemango** Associate Director – Health, Chief of Immunization UNICEF Health Section/NYHQ

# **Acronyms and abbreviations**

APE	Agentes Polivalentes Elementares	
AWD	Acute Watery Diarrhoea	
BLS	Brand Lift Study	
CDS	COVID-19 Vaccine Deployment Support	
СНС	Community Health Committees	
СНТ	County Health Teams	
CHV	Community Health Volunteers	
CHW	Community Health Workers	
со	Country Office	
CSO	Civil Society Organizations	
CRP	Community Resource Persons	
cVDPV1	circulating Vaccine-Derived Polio Virus type 1	
cVDPV2	circulating Vaccine-Derived Polio Virus type 2	
CLWD	Children Living with Disabilities	
DHIS	District Health Information System	
DHS	Demographic Health Survey	
DTP	Diphtheria, Tetanus and Pertussis	
ECD	Early Childhood Development	
EPI	Expanded Programme on Immunization	
FIC	Fully Immunized Children	
FGM	Female Genital Mutilation	
FMoH	Federal Ministry of Health	
HCD	Human Centred Design	
HiB	Haemophilus influenzae type b	
HPV	Human Papillomavirus	
HQ	Headquarters	
IDP	Internally Displaced People	
141	Insights for Impact	
loGT	Internet of Good Things	
IPV	Inactivated Polio Vaccine	

IVR	Interactive Voice Response		
КАР	Knowledge, Attitudes and Practices		
КАРВ	Knowledge, Attitudes, Practices and Behaviours		
LNCBP	Leave No Child Behind Project		
M2M	Mother to Mother		
MCCIP	Montserrado County Coverage Improvement Project		
MCV1	Measles Containing Vaccine		
MENA	Middle East and North Africa		
МоН	Ministry of Health		
MR	Measles Rubella		
OPV	Oral Polio Vaccine		
PLW	Pregnant and Lactating Women		
PCV	Pneumococcal Vaccine		
PHC	Primary Health Care		
PWD	People with Disabilities		
RBA	Rwanda Broadcasting Agency		
RCCE	Risk Communication and Community Engagement		
RO	Regional Office		
RTV	Rwanda Television		
SBC	Social and Behaviour Change		
SDG	Sustainable Development Goal		
ТСV	Typhoid Conjugate Vaccine		
TPVICS	Third-Party Verification Immunization Coverage Survey		
UC	Union Councils		
UNHCR	United Nations High Commissioner for Refugees		
VASI	Voice and Space Initiative		
VPD	Vaccine Preventable Disease		
WIW	World Immunization Week		
WPV1	Wild Polio Virus type 1		

## **Overview**



Gender is a critical determinant of health outcomes. Gender norms and expectations result in differences between how women, men, girls and boys know about, seek and access health services and resources.<sup>1</sup> Gender also influences immunization decision-making and uptake. Vaccines impact the well-being of individuals at various stages of the life course – as infants and children, adolescents and women of childbearing age. As primary caregivers, women bear the responsibility of ensuring childhood vaccination, but their lower status within the household often restricts them from making health-related decisions for themselves or their children.

Restrictions on mobility, the burden of domestic care-giving and lower levels of health literacy pose additional barriers.<sup>2</sup> Furthermore, gender biases can reinforce discrimination in health facilities and discourage uptake of services. Female health workers are recruited to overcome gender barriers in accessing health services, but they are also impacted by prevailing gender norms.

UNICEF has developed a Journey to Health and Immunization framework to promote a holistic understanding of the immunization process. Gender barriers impact each stage of the journey (see **Figure 1**). A deeper understanding of how gender impacts immunization behaviours and outcomes – before, during and after the vaccination experience – can result in more gender-responsive immunization programmes.

<sup>1</sup> Muralidharan, A., Fehringer, J., Pappa, S., et al. (2015). Transforming gender norms, roles, and power dynamics for better health: evidence from a systematic review of gender-integrated health programmes in low- and middle-income countries. Futures Group.

### Figure 1. Gender and the journey to health and immunization



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Immunization is a cost-effective way to prevent childhood morbidity and mortality and reduce health-care costs and inequities.<sup>3,4</sup> The World Health Organization's Immunization Agenda 2030 (IA 2030) envisions a world where everyone, everywhere, at every age, fully benefits from vaccines to improve health and well-being from 2021-2030 and will contribute towards achieving Sustainable Development Goal (SDG).<sup>3</sup> Expanding coverage and achieving immunization for all requires understanding and responding to how gender norms, roles and relationships impact vaccination. It is also important to recognize that gender influences women, men, girls and boys and the diversity within these groups. Completing or receiving vaccinations, understanding the importance of vaccination, having the ability to make vaccine-related decisions and use health services impacts national health outcomes and the health of women, families and the next generation.

This compendium of case studies – from Liberia, Mozambique, Pakistan, Rwanda, Sudan and Yemen – describes immunization demand programmes with an explicit gender focus led by UNICEF country offices. These include stand-alone immunization efforts as well as integrated programmes where immunization is part of a package of essential life-saving practices. Routine and COVID-19 vaccine interventions are included. The cases comprise both gender responsive and transformative interventions (see **Figure 2**). Each case has five sections:

- Overview of the context and background
- Analysis of the gender barriers
- Description of the intervention and how gender considerations were included in design and implementation
- Key achievements
- Summary of lessons learned based on innovations, promising or emerging practices.



### Figure 2. Gender-Responsive Continuum

Source: UNICEF, 2020

<sup>&</sup>lt;sup>3</sup> Andre, F. E., Booy, R., Bock, H. L., Clemens, J., Datta, S. K., John, T. J., ... & Schmitt, H. J. (2008). Vaccination greatly reduces disease, disability, death and inequity worldwide. *Bulletin of the World Health Organization*, 86, 140-146.

<sup>&</sup>lt;sup>4</sup> Nandi, A., & Shet, A. (2020) Why vaccines matter: understanding the broader health, economic, and child development benefits of routine vaccination. *Human Vaccines & Immunotherapeutics*, 16:8, 1900-1904.

### Table 1. List of case studies

Country	Approach	Key gender-related changes	Level of gender integration
Liberia	Gender and equity-focused urban outreach campaign	Male engagement Recruitment of female vaccinators and mobilizers	Responsive
Mozambique	Promoting male engagement for integrated health practices	Male engagement Joint decision-making Sharing of household responsibilities	Transformative
Pakistan	Social listening to promote female digital engagement	Female digital engagement Acceptance of female health workers	Responsive
Rwanda	Entertainment-education to address gender norms	Gender socialization Male engagement in child rearing	Transformative
Sudan	Social listening for vaccine equity during COVID-19	Female engagement Informed decision-making	Responsive
Yemen	Mobilizing mothers to promote essential family practices	Women as change agents Informed decision-making Income generation/skill building	Transformative

### **Purpose**

These case studies present examples of how demand generation, also referred to as Social and Behaviour Change (SBC), efforts can reduce gender inequities in immunization as well as transform norms and power structures that limit women's mobility, voice, decision-making and control over health decisions. The case studies capture the strategic thinking behind planning and implementation of gender-responsive immunization demand efforts. They describe how selected interventions address gender barriers and provide lessons learned to guide future immunization efforts. The range of interventions using varied communication platforms can provide recommendations for planning, improvements and scale-up of programmes. Although the interventions focus on demand generation, the supply and services aspects are closely linked. Likewise, the focus is on immunization but many of the interventions relate to broader public health issues. Intervention effectiveness and impact are not assessed in these case studies.

### Audience

This compilation is intended for health, SBC and gender practitioners, as well as anyone responsible for planning, implementing, managing or leading immunization programmes. This includes national stakeholders including government officials, civil society and community-based organizations, and international development practitioners and humanitarian aid workers working on immunization programmes.

### **Country and case selection process**

Based on an equity mapping exercise conducted by the health team at UNICEF Headquarters (HQ) in 2021, countries where immunization demand generation efforts had an explicit gender focus were identified. The HQ team asked the regional offices (ROs) to recommend countries implementing programmes with a focused gender component. The ROs established contact between the consultant and the country office (CO) teams. Email contact was established with all 10 country offices; requests were made for additional information and Zoom consultations were conducted. Six cases were selected from the 10 countries, based on the following considerations:

- Level of gender integration (responsive or transformative) in the intervention
- Availability of information and existing documentation in English
- Regional representation (aiming to have 1–2 case studies per region)
- Availability, support and collaboration with the CO

### Methodology

The case studies draw on a combination of primary and secondary research. Secondary sources include national surveys, peer-reviewed articles, reports, guidelines and resources produced by UNICEF and partners. The primary research involved consultations with selected COs from December 2021 to May 2022. The purpose was to understand promising practices that have integrated gender considerations in the design, implementation and monitoring of immunization demand generation efforts. A list of questions was developed to guide the consultations. The consultations provided information on the context, programme/intervention design and implementation, positive experiences or what worked well and challenges or what did not work as well.

The consultation process proceeded in three stages:

- 1. Survey the situation and understand the immunization demand generation efforts with a gender component. Identify a specific programme for the case study.
- 2. Deeper look to gain a better understanding of the selected case including the gender barriers, intervention design to respond to the barriers, scope and coverage, contribution to gender equality and key achievements. Discuss follow-up interviews and timeline.
- 3. Capture community voices and understand the experiences and perspectives of programme participants, community mobilizers or influencers and community health volunteers/workers/ vaccinators.

A total of 17 in-depth interviews were conducted with staff/consultants from UNICEF COs. In most cases an initial call was set up to brief the SBC team/focal point on the assignment and to get more information about the range of immunization efforts with a focused gender component. This was followed by a structured interview with either the SBC Specialist or the EPI focal point; in some cases, an additional interview was held with the gender focal point or field-level SBC Officers. Following consultations with the UNICEF CO SBC team, a third round of interviews was held with programme participants, service providers or partners. A question guide was developed and shared with the COs. CO teams or partners conducted the interviews in the local language and provided translated transcripts to the consultant. Interviewees gave informed consent (in most cases verbal) to use their names, details, photographs and direct quotations.

### Limitations

The case studies rely on available documentation and the perspectives and experiences of participants. Rigorous evaluation data were not available for any of the cases. Sex-disaggregated data were not available in some cases, and in other cases where data were available there was no analysis of the reasons for disparities identified. In the case of integrated interventions where routine immunization was part of a package of family practices, quantitative data to establish causality or attribution to immunization coverage were not available. Comparisons or generalizations cannot be made based on the analysis. The purpose was not to assess or ascertain impact. And finally, the assignment was conducted remotely and may not adequately capture the local context.



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### Vaccine outreach campaigns in Liberia

This short-term intensive immunization outreach activity was implemented in urban Montserrado County, home to the capital city Monrovia. After-hours vaccination drives were conducted in marketplaces, making it easier for working mothers as well as fathers to have their children vaccinated. Reminder phone calls, door-to-door visits and community events were held. Key barriers faced by women such as distance, transportation costs, time away from household chores and travelling with young children in tow were circumvented. Recruitment of female vaccinators promoted vaccine acceptance and uptake among families who were resistant to male vaccinators. Immunization data show that coverage was higher and dropout rates lower in the years where these efforts were conducted. Integration of immunization with nutrition and birth registration services was a facilitating factor. The case study highlights the important role of coordinating delivery of essential services with community engagement and demand generation activities.

### **Model Families in Mozambique**

The Model Families Initiative was implemented to improve child health outcomes while fostering a shift in gender norms. Model Families is an innovative community-based approach to promote an integrated package of health and immunization, hygiene, sanitation, education and protection practices. Model Families are certified based on adoption of established behavioural indicators verified by Community Health Committees (CHC). This initiative seeks to address gender inequalities at the household and community levels. The formation of CHCs with a majority or at least equal ratio of females to males ensures women and their perspectives are represented. The emphasis on male engagement and sharing of household responsibilities aims to shift gender roles and perceptions of what is typically considered a male or female responsibility. Promoting an integrated package leads to gains across multiple health outcomes and promotes health-seeking behaviours for children and caregivers. This approach has the potential to promote broader-level social change by challenging gender norms within households and communities.

### **Digital Campaigns in Pakistan**

Insights from social media were used to develop tailored messages and increase vaccine uptake. Evidence generated from the digital campaign which reached nearly 7.2 million people was used to inform gender-responsive demand efforts for routine immunization, COVID-19, measles, rubella and typhoid vaccines. Public Facebook posts about vaccines were analysed and the effectiveness of different content, messages and messengers in changing behaviours was tested through Brand Lift Studies. The insights-based strategy was gender responsive and resulted in increased conversation among women, especially young mothers, about vaccines. Messages addressing concerns related to vaccine safety during pregnancy and lactation were designed and disseminated based on analysis of public narratives on social media. The campaign helped restore confidence and trust among caregivers to complete routine immunization. The digital component complemented ongoing community engagement efforts such as awareness-raising sessions, door-to-door visits and engagement of religious leaders and elders.

### **Entertainment-education in Rwanda**

An integrated entertainment-education initiative was used to address gender norms across children's health, immunization, education, protection, hygiene, and sanitation programmes. The initiative combines radio, television, theatre, community engagement, and digital media on two multimedia platforms – *Urunana* and *Itetero*. Listenership of the *Urunana* radio drama is around six million. Reach of Itetero is also estimated at six million, including children aged 3–6 years. The YouTube channel has approximately five million subscribers. Gender transformation is central to both programmes and participants are urged to critically examine gender norms, roles and relationships. The interventions address power inequalities in families and communities. Both programmes embed gender socialization within a broader focus including health and immunization, resulting in changes across multiple domains of child development. Assessments and feedback from community members show that both *Itetero* and *Urunana* have contributed to positive changes in several aspects of early childhood development.

### **Social Listening in Sudan**

Social listening was used to understand and address COVID-19 vaccine hesitancy. The intervention drew on data captured through the Talkwalker application which UNICEF Sudan has been using since August 2021. Initially Talkwalker was used as a monitoring tool to capture the response to demand creation and service delivery efforts. Social listening highlighted that fewer women compared to men were engaged in online conversations regarding vaccines. UNICEF produced tailored messages that responded to women's concerns about vaccine safety during pregnancy, breastfeeding and menstruation and disseminated them through social media. Engagement activities were also included in health centres and communities. Social listening informed gender-responsive messaging, provided a space for women's and men's concerns to be voiced, addressed vaccine hesitancy and resulted in enhanced female engagement on social media. Women were able to share questions and fears and receive accurate information. The rapid feedback and adaptation were particularly important for a pandemic response.

### Mother to Mother Clubs in Yemen

Mother to Mother (M2M) Clubs were established to promote child survival, well-being and development. The clubs provided a forum for mothers to learn, share and discuss issues related to child survival, well-being and development. Each club member shares what she has learned with at least five houses in her neighbourhood. M2M Clubs have promoted messages on COVID-19 through house-to-house visits, women's sessions, school-based activities, and puppet shows. The sessions and home visits countered vaccine refusal and hesitancy and provided reminders to complete/ follow the recommended schedule. Having a pre-existing group that meets regularly provided a base for risk communication and community engagement during the COVID-19 pandemic. Participation in M2M Clubs changes how women are perceived and valued in society. The benefits go beyond immunization and bolster several areas of health and well-being of children, women and ultimately families. The initiative is transformative and contributes towards gender equality by fostering agency and decision-making around health behaviours.



# Case study 1

# Promoting routine immunization through outreach campaigns in urban Montserrado, Liberia

"Decision-making and taking the child [for vaccination] are two different things. ...[W]hen the father is an educated person, they always tell the mother: 'This child needs to take vaccines. When [are] you supposed to carry the child?' In fact, ... they will want to look at the vaccine card to look at the date. Then they will be reminding you... the father [is] the one that will tell the mother [to] carry the child for the vaccine."

Female Caregiver, Margibi County<sup>5</sup>

### **Background and context**

Liberia launched its Expanded Programme on Immunization (EPI) in 1978 to reduce child mortality and morbidity from measles, polio, diphtheria, neonatal tetanus, pertussis and tuberculosis by 80 per cent. The pentavalent vaccine was successfully introduced in 2008. Currently, EPI covers the five regions, 15 counties and 91 districts of Liberia.<sup>6</sup>

Children are considered to have received all basic vaccinations if they have received the BCG (tuberculosis) vaccine, three doses each of DPT (diphtheria, pertussis and tetanus) and polio vaccines, and a single dose of the measles vaccine. The percentage of children aged 12–23 months who have received all basic vaccinations has fluctuated over time, increasing from 39 per cent in 2007 to 55 per cent in 2013. Coverage then declined to 45 per cent in 2016 (see **Figure 3**).





<sup>5</sup> UNICEF. (2017). Knowledge, Attitudes, and Practices of Parents/Caregivers on Immunizations in Liberia: A KAP Study. Ministry of Health, Government of Liberia and UNICEF.

<sup>6</sup> Ministry of Health. (n.d.). Expanded Programme on Immunization: Comprehensive Multiple Year Plan 2016-2020. Ministry of Health, Government of Liberia.

In 2019–2020, 51 per cent of children aged 12–23 months and 44 per cent aged 24–35 months received all basic vaccinations. A second measure of vaccination coverage is the percentage who have received all age-appropriate vaccinations; that is, all basic vaccinations along with a birth dose of oral polio vaccine (OPV), a dose of inactivated polio vaccine (IPV), three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of the yellow fever vaccine. Around one third – 39 per cent aged 12–23 months and 31 per cent aged 24–35 months – have received all these vaccinations (see **Figure 4**).<sup>7</sup>





Source: Liberia DHS Survey

<sup>&</sup>lt;sup>7</sup> Liberia Institute of Statistics and Geo-Information Services (LISGIS) (2021). Liberia Demographic and Health Survey 2019-20. Monrovia, Liberia and Rockville, Maryland, USA: Ministry of Health, and ICF.

Coverage for different vaccines varies. It is highest for the BCG vaccine and the first dose of the DTP-HepB-Hib vaccine (91 per cent each). Measles and yellow fever vaccine have lower coverage. In the case of multi-dose vaccines, coverage is highest for the first dose and falls in subsequent doses. Overall, 6 per cent of children aged 12–23 months and 7 per cent aged 24–35 months were reported not to have received any vaccinations. Among children aged 12–23 months, basic vaccination coverage is somewhat higher among boys than among girls (52 per cent versus 49 per cent). Coverage rates do not exhibit a strong relationship with either mother's education or household wealth, although rates are lowest among children in the poorest households. By county, basic vaccination coverage is highest in Lofa (66 per cent) and lowest in Sinoe (27 per cent). Coverage in Montserrado is 54 per cent.<sup>8</sup>

Although Liberia has made progress in improving key health outcomes, with improvements in infant and child as well as maternal mortality, barriers to accessing reproductive health services, immunization and other health-care services remain.<sup>9</sup> Health facilities are often difficult to reach due to distance, poor road conditions, limited referral facilities and non-existent or inefficient public transport. The availability of the health workforce is below the World Health Organization recommendation of 23 health workers per 10,000 persons – Liberia has 11.<sup>10</sup> However, the government is investing in recruiting, training and supporting additional health workers and volunteers. A drop in immunization coverage was noted during the 2014 Ebola outbreak with the proportion of children fully immunized declining from 73 per cent (before the outbreak) to 36 per cent (during) and recovering to only 53 per cent (after).<sup>11</sup> The Ebola outbreak and the COVID-19 pandemic further stressed the system due to intermittent closures and disruptions in service delivery which affected both routine and emergency care, including a decrease in deliveries by skilled birth attendants, antenatal care visits, and vaccination coverage. Further, people avoided visiting health facilities due to fear of transmission.<sup>12</sup>

### **Gender barriers**<sup>13</sup>

A knowledge, attitudes and practices (KAP) study conducted in 2017 highlighted several barriers to vaccine uptake. Health workers shared that, in many cases, mothers did not fully understand the importance of vaccines and did not follow the schedule. They found that carrying infants to the facility while pregnant or postpartum was difficult, adding that after giving birth they were too tired or weak to keep up with vaccine schedules. In other cases, caregivers would take their child to work with them and could not make the time to go to the health facility. The distance to the health facility and the cost of transportation posed a barrier for caregivers. The study also highlighted that fathers did not typically support or encourage mothers to take their children for vaccines. Supply-side barriers highlighted in the KAP study included lack of vaccines at health facilities, low-skilled or unskilled vaccinators, as well as the practice of cancelling vaccination sessions to prevent wastage} of doses if too few children showed up. At times, caregivers would be asked to come back at another time but could not afford to pay for multiple journeys. They said that when they were told to return another time, they were discouraged from making future visits.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> UNICEF. Situation Analysis of Children and Women in Liberia. (2018). UNICEF and Coram International.

<sup>&</sup>lt;sup>10</sup> Liberia Ministry of Health. (2016). Liberia Service Availability and Readiness Assessment (SARA) and Quality of Care Report. Ministry of Health, Government of Liberia.

<sup>&</sup>lt;sup>11</sup> Wesseh, C.S., Najjemba, R,. Edwards, J.K., Owiti, P, Tweya, H., & Bhat, P. (2017). Did the Ebola outbreak disrupt immunisation services? A case study from Liberia. *Public Health Action*. Jun 21;7(Suppl 1).

<sup>&</sup>lt;sup>12</sup> Ensuring access to routine and essential services during covid-19 through community-based services in Liberia. (2020). Primary Health Care Performance Initiative.

<sup>&</sup>lt;sup>13</sup> This section draws on analysis from the Knowledge, Attitudes, and Practices of Parents/Caregivers on Immunizations in Liberia: A KAP Study (2017). Ministry of Health, Government of Liberia and UNICEF. Qualitative data were collected in Montserrado County and one randomly selected county from each of Liberia's five other health regions – Bomi, Bong, Margibi, Maryland, and Rivercess. The quotes are in Liberian Kreyol and have not been edited.

Participants from low vaccination coverage communities were more likely to mention distance to health facility and transportation costs as barriers than those from high coverage communities. Parents' attitude, such as carelessness or laziness, were the most common response mentioned by both women and men. Women were more likely to mention being sent away by vaccinators because of too few patients and fear of side effects as barriers to vaccination completion. Men were more likely to mention distance to the health facility. **Table 2** presents a summary of barriers to vaccine uptake as reported by male and female caregivers (referred to as community members in the study) and health workers.

Most mentioned	Community Members	Health Workers	
1 <sup>st</sup>	Parental attitudes (carelessness, laziness, weakness)	Distance from health facility	
2 <sup>nd</sup>	Distance from health facility	Parental blame (fear of vaccine side effects)	
3 <sup>rd</sup>	Vaccination services blamed (no vaccines, no vaccinators, poor communication skills of health workers)	Parental attitude (carelessness, laziness, weakness) Parent not home during vaccinations/ seasonal rains	
4 <sup>th</sup>	Parent not home during (mobile) vaccinations	Lack of vaccination information	
5 <sup>th</sup>	Vaccination services blamed (patients sent away because too few showed up)	Parental blamed (parent not vaccinated as child, so thinks own child does not need, or parent fears health workers are pushing English to erase local languages)/Transportation costs	
6 <sup>th</sup>	Parental blame (fear of side effects)	N/A	
7 <sup>th</sup>	Lack of vaccination information	N/A	
8 <sup>th</sup>	Transportation costs	N/A	
9 <sup>th</sup>	Vaccination services blamed (long waiting times)	N/A	
10 <sup>th</sup>	Ebola-related vaccination services cancelled/ Poor road conditions	N/A	
11 <sup>th</sup>	Fear that the vaccine contains the Ebola virus/ loss or lack of vaccination card/migration/ seasonal rains	N/A	

### Table 2. Barriers to vaccine uptake

In terms of decision-making, community members were more likely than health workers to say a child's mother was responsible for decisions about vaccinations than the father; the father was the second most mentioned person. While some participants said both parents decided together, a few also mentioned the mother's parents, and even fewer cited health workers or other family members as the decision makers. Females were more likely than males to say mothers were responsible for vaccination decisions, while male participants were more likely to attribute the decision to fathers. When speaking about the mother's role in decision-making specifically, some women (and a few men) invoked women's reproductive or child-caring roles. For example, one mother stated, "I'm the one (to) bear the nine months pain, so I can't sit down and say I cannot go for vaccine. I can carry my child to the hospital they give vaccine to her, because I want for the body to protect."

Traditional gender roles were also referenced. Many respondents said men had to provide for the family so women took on the responsibility for childcare. As one caregiver explained, "Some of the time in our setting you will find the mother doing it because the man is always the bread winner... They are the one going to work, so you will be left alone with the child to take the child to the hospital for their vaccination." Mothers also said it was their responsibility to take the child for vaccination as they would have to bear the burden if the child got sick.

Men were divided on the issue of whether their wives had to ask them for permission to take their children or themselves for vaccination. Some said that "asking permission" really just meant that a woman had to inform her husband, while others noted that a woman only had to "ask permission" if money or transportation was needed. A father expressed, "Yes, in this situation they will ask for permission…when the road is bad and say: "Oh! Daddy I want you to carry me [on a motorbike], because I alone [am] not able to take that way; or I don't have transportation and I can't go with this baby because I'm not well so you need to carry us." Then they ask for permission. But notwithstanding, when they are healthy enough and the road is paved then they can go alone. Really, I am a man, a husband…even when the wife not carry [the child], it's my bound responsibility…to carry my child, even they [when they have] big belly because it's my responsibility, because I need a healthy child for the future."

### The intervention – immunization outreach campaigns

This case study looks at two short-term intensive immunization outreach efforts in Liberia's urban centre, Montserrado County. The Montserrado County Coverage Improvement Project (MCCIP) was implemented from 2017 to 2018, in two phases – from April to December 2017 and from July to December 2018. This project led, in turn, to the Leave No Child Behind Project (LNCBP), from March to June 2021, a four-month collaboration between the Japanese Government and UNICEF to support the Liberia Ministry of Health (MoH) in reaching children with an essential package of services including immunization, nutrition and birth registration. Since the late 1970s, when vaccines were introduced widely in developing countries, programmes have targeted rural populations. While urban health indicators are typically higher than rural ones, pockets of health and social inequities exist in urban slums and peri-urban areas. The recent and projected growth in urban populations has not been adequately factored into the planning and implementation of strategies. These have left the poor living in urban and peri-urban areas unevenly protected and at risk for disease outbreaks. Focusing on marginalized groups in urban areas and from lower wealth quintiles is critical for ensuring equitable access to vaccinations and lifesaving services.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> Grundy, J., Wang, X., Hirabayashi, K.C. et al. (2019). Health and immunisation services for the urban poor in selected countries of Asia. *Infectious Diseases of Poverty*, 8, 26.



### Figure 5. Caregiver receiving servies as part of the LNCBP

Montserrado County is the smallest of the 15 counties in Liberia, yet home to about 40 per cent of the population. It is the most densely populated, with most of the country's economic activities concentrated in its largest city, the capital Monrovia, and its surroundings. Monrovia is surrounded by densely populated slum communities who engage in petty trading as their main source of income. Inhabitants from other parts of the country come to Montserrado County to engage in trading, making the entire population highly mobile. Efforts to improve immunization coverage in these densely populated, marginal communities through regular fixed-post health facilities have been met with limited success, evidenced by the increasing number of missed children, with Montserrado usually reporting the highest numbers of vaccine preventable diseases (VPDs).<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> Liberia Health Management Information System (HMIS).

The goal of the MCCIP project was to reduce VPD-related morbidity among children in Montserrado County. The objective was to increase immunization coverage (as measured by Penta 3 coverage) to 94 per cent from a 2016 baseline of 79 per cent. To strengthen service delivery, reduce dropout rates and improve coverage, additional funding was obtained for the second phase. The expected outcomes included:

- Increased number of children vaccinated with Penta 3 (by 15 per cent);
- Reduced number of missed children for measles (to less than 10 per cent);
- Reduced dropout rate between Penta 3 coverage and measles (by 10 per cent).

Building on the MCCIP, the LNCBP aimed to increase measles vaccination coverage in Central Monrovia district from 39 per cent in 2018 to over 50 per cent. The project expected to reach 56,218 children under 12 months of age with integrated immunization, nutrition and birth registration services with a target of:

- at least 50 per cent under 12 months (8,350 girls and boys) reached with measles vaccine (MCV1);
- at least 5,000 children who missed birth registration referred/notified for birth registration and certification;
- at least 70 per cent of missed or zero-dose children identified and referred for immunization, birth registration and nutrition services.

Both projects were coordinated with the county health teams (CHTs). At the central level, the project was coordinated by a team of managers and technical experts from EPI, National Health Promotion, Nutrition, Birth Registration and Community Health departments. At the county level, Health Officers and technical officers of the coordinating departments supervised and implemented the projects.

A Community Health Volunteer (CHV) was recruited for each health facility and was expected to visit 10 households per day to screen for children who had missed vaccines, provide information and counseling on the vaccine schedule, refer families for health, nutrition or birth registration services and inform them about the date, location and time for the integrated outreach services. Social mobilizers were recruited within each health facility catchment area, and trained on interpersonal communication, the benefits of vaccines and the risks of missing them, as well as the benefit of acquiring a birth certificate. Each mobilizer was required to visit 30 households per day. To ensure equal representation and to reach female caregivers, CHVs were gender balanced, 50 per cent men and 50 per cent women. An effort was made to recruit an equal number of male and female mobilizers, but the ratio ended up being around 39 per cent female and 61 per cent male.

In addition to vaccination services at facilities, vaccination outreach teams were mobilized to identify, track and offer vaccines to children under five who had missed or not completed the recommended schedule. This count allowed a baseline to be established and to plan follow-up home visits, counselling and referral for services. After-hours vaccination drives were conducted in marketplaces, making it much easier for working mothers as well as fathers to have their children vaccinated. Normal facility hours were until 2 p.m. only on weekdays but the extended hours provided services until 4–5 p.m. and on weekends. Reminder phone calls were made to mothers, both for initial vaccinations and return visits. Door-to-door visits were conducted by an outreach team comprising a vaccinator and a recorder. Musicians and artists were also engaged to promote immunization messages.



### Figure 6. Artist promoting immunization messages at Duala market

Cash incentives motivated vaccinators to make the extra effort and travel to remote areas and reach the last mile. Each outreach team was expected to spend about two days in a location and then move on to another location. The CHV mobilized the community members a day or two before the arrival of the outreach team. In line with preferences voiced by some families, female vaccinators were used for mass vaccination campaigns.

Young women in Liberia are initiated into adulthood through traditional schools referred to as bush schools or the Sande Secret Society. The schools are managed by traditional leaders and the National Council of Chiefs and Elders, and outsiders do not have access to these 'secret' societies. The practice of female genital mutilation is closely associated with attending bush schools. Female traditional leaders were mobilized in some communities to engage with their network and reach bush schools. Young mothers often bring their babies to the bush schools. Female vaccinators went to the bush schools attended by young mothers and vaccinated infants. Shots were offered even in some male bush schools.

In Liberia, mothers are the primary caregivers for children, but require their spouses' support to make health-related decisions. This support could range from approval or permission, to money for transportation or a ride to the facility or to help with understanding and following the vaccine schedule. Previously, immunization messages tended to focus only on mothers. Communication materials and messages were developed to encourage fathers (see Box). When the health team conducted home visits they asked to speak with both parents. If the fathers were not present, they would telephone them and get their permission. Sometimes the providers needed to reschedule visits because the mother had to consult the father and could not make the decision on her own.

# THU LOVE OF LIBERTY BROUGHT LOUTER

Mustapha:	Hawa, thank God I see you and your friends them here. You na hear the news?		
Hawa:	What news Mustapha?		
Mustapha:	You ain't hear the Ministry of Health people coming around to give our children polio vaccine?		
Hawa:	No oh Mustapha, so what time they coming give our children this polio vaccine?		
Mustapha:	The Ministry of Health People say they will be giving the vaccine to our children from (specify time).		
Hawa:	So who them will be taking this polio vaccine?		
Mustapha:	All children from the time they were born to the time before they reach five years old will take the polio vaccine.		
Hawa:	But that all, Mustapha?		
Mustapha:	No oh Hawa. The vaccinators will go from house to house and they will also go to the schools, churches, mosques and market places. They will even be giving the vaccine to the children at the different clinics or hospitals during this time.		
Hawa:	Thank you Mustapha for that good news. I will tell all my friend baby-ma them to get their children ready to take the polio vaccine.		
Mustapha:	I myself going to tell all the men, even the pastors and imams in the town to encourage their women and their congregation to let the children take the vaccine.		
Hawa:	Mustapha, thank you for telling us yah. I going tell my husband and my sister now about the vaccination.		
Mustapha:	Yes, let us tell everyone because our children da our future and we know the vaccines will give them a healthy start in life.		

**Radio Spot Script** 

(in Liberian Kreyol)

**Promoting Male Engagement** 

This message is brought to you by the Ministry of Health and partners with support from UNICEF

### Scope and coverage

Both the MCCIP and LNCBP were geographically delimited initiatives implemented in the urban and peri-urban areas of Montserrado County. The MCCIP covered all seven districts (Bushrod, Todee, Careysburg, Central Monrovia, St Paul, Somalia Drive and Commonwealth) and included:

- Cash incentives to 242 vaccinators from 114 health facilities and seven market sites to conduct outreach activities
- Refresher training for 183 health-care workers (120 vaccinators and 63 supervisors)} on immunization
- 114 general CHVs and 60 health workers trained on defaulter tracing and interpersonal communication skills
- 114 health facilities equipped to provide immunization services.

For the LNCBP, conducted in one district – Central Monrovia – a total of 1,200 households were visited from March to June 2021. The project recruited and trained:

- 380 volunteers (114 males and 266 females) to map children who have missed vaccines
- 174 vaccinators (64 males and 110 females)
- 74 social mobilization volunteers (78 males and 96 females)
- 22 recorders (10 females and 12 males) for birth registration outreach services
- 19 County Health Teams and 12 district supervisors.

### **Budget**

MCCIP Phase 2 - \$144,022 and LNCB \$41,193.16

### Timeline



<sup>16</sup> All budgets are in US dollars (US\$).

### **Achievements**

These outreach initiatives provided targeted information to mothers and fathers, responded to the needs of working parents, encouraged fathers to support wives in completing their children's vaccinations and made counselling and services accessible through door-to-door visits and mobile vaccination drives. The services circumvented key barriers faced by women such as distance, transportation costs, time away from household chores and travelling with young children in tow. Home visits led to the identification of issues beyond immunization and gender such as disability or lack of parents' birth registration.

Marketplace vaccine drives ensured working mothers and fathers did not have to choose between losing a day's income or vaccinating a child. Extended hours and weekend delivery allowed women and men to bring their children after work or during holidays. Young (teen) mothers also benefited because they did not have to miss school. Recruitment of female vaccinators promoted vaccine acceptance and uptake among families who were resistant to male vaccinators. Both parents were counselled during home visits and if the father was not home, a follow-up call was made. When fathers understood the importance of vaccines, it was easier for mothers to take the child to the facility or get the money they needed for transportation. These efforts are an important step in promoting fathers' engagement in children. Service providers also noted that many fathers were accompanying their wives and children. Additional data are required to discern which parent brought the child for vaccination and if there is any disparity based on sex among the children who received vaccines.

The MCCIP Phase 1 contributed to an increase in immunization coverage of children under the age of one in Montserrado by 19 per cent (from 56 per cent in September 2016 to 75 per cent in September 2017). From April to September 2017:

- 37,877 children less than one year received BCG vaccine
- 24,590 children received measles vaccine
- 28,260 received Penta 3 vaccine
- 22,086 children were fully immunized.

**Figure 8** shows the increase in coverage by vaccine. A total of 5,463 defaulter tracing phone calls were made by vaccinators from August to December and 4,867 children were immunized following the calls. Dropout rates between Penta 1 and Penta 3 decreased from 12.3 per cent in 2016 to 5.8 per cent in 2017. Additionally, 39 facilities were added to the Liberia District Health Information System (DHIS) and are now regularly reporting immunization data. Forty-five additional health facilities were equipped (staffing and material resources) to provide immunization services daily from 8 a.m. to noon at fixed sites and weekly outreach at afternoon hours.



### Figure 7. Children under 1 year vaccinated in Montserrado County

Source: Liberia DHIS2

Figure 8. Delivery of integrated services



In the second phase of MCCIP, measles vaccine coverage increased from 63 per cent in 2017 to 97 per cent in 2018. Dropout rates for both Penta 1 and measles decreased from 17 per cent to 7 per cent in 2018 (see **Table 3**). Some 8,486 parents or caregivers received awareness messages and 1,097 who were hesitant to vaccinate were identified for follow-up. CHVs identified 1,717 defaulters, of whom 1,632 were referred and 1,152 (70 per cent of those referred) were vaccinated at the health facility. A total of 3,935 reminder calls were placed to parents/caregivers during the reporting period from 114 health facilities, after which 3,317 children were brought in to be vaccinated. Approximately 4,407 children were vaccinated at seven market sites. **Table 3** shows the increase in coverage and decrease in dropouts from 2016 to 2018.

Year	Penta 1 coverage	Penta 1-3 drop-outs	Penta 3 coverage	Measles coverage	Penta 1 Measles drop-out
2016	89.5	11.2	79.5	74.2	17.09
2017	75.9	4	70.9	63	17.00
2018	104.4	5.3	98.8	96.9	7.18

### Table 3. Coverage and dropout for select antigens in Montserrado

Source: Liberia HMIS

As part of the LNCB project, a count of all children under five years old was conducted in 174 health facilities offering immunization services. Children in each household were tracked and referred for services they missed. Penta 1, Penta 3, MCV1, MCV2 and IPV coverage increased by 10 per cent, 16 per cent, 15 per cent and 25 per cent respectively, during the four months of implementation (February to June 2021), as compared to the same period in 2020. Similarly, the number of eligible children who received all the required vaccines before their first birthday increased by 17 per cent, while the coverage of eligible children who received all required antigens before age two increased by 22 per cent. The project led to a reduction in the dropout rate of 21 per cent (Penta 1 and MCV 1) and 19 per cent (Penta 1 & Penta 3) to 12 per cent (Penta 1 & MCV1) and 9 per cent (Penta 1 & Penta 3), as illustrated in Table 4.

Antigen	Coverage from Feb to Jun 2020 (Before)	Coverage from Feb to Jun 2021 (During)	
Penta 1	74%	84%	
Penta 3	60%	76%	
MCV1	58%	73%	
MCV2	11 %	36%	
IPV	56%	71%	
Fully immunized (1 year)	35%	52%	
Fully immunized (2 year)	0%	22%	
Penta 1 and MCV 1 (Drop out)	21%	12%	
Penta 1 and Penta 3 (Drop out)	19%	9%	

#### Table 4. Children under 2 years immunized before and during the project in Montserrado

Source: DHIS2, August 2021

During the project, birth certificates were issued to 4,110 children (2,161 females and 1,949 males). While sex-disaggregated data were not collected for the headcounts and vaccinations, it can be assumed that similar gains were made for both girls and boys, in line with national vaccine coverage trends revealing minimal gender disparities. Immunization data show that coverage was higher and dropout rates lower in the years when these efforts were conducted (see **Figure 9**).





Source: Liberia DHIS2

### **Lessons learned and recommendations**

These timebound, intensive initiatives demonstrated positive impacts on immunization coverage. Integration of immunization with nutrition and birth registration services was a facilitating factor, as caregivers drawn to facilities for nutrition or registration often ended up getting their children vaccinated. In particular, project beneficiaries interviewed for this case study associated the LNCBP first and foremost with birth registration. They shared how difficult it was to go to the ministry to get birth certificates and emphasized how the integrated project saved them transportation expense and time. One county health team member commended the project for bringing services from the central level straight to the community. He said that extended hours made it possible for working mothers and fathers to access services and not have to lose a day's income. Offering vaccination services in the marketplace made access even easier.

Vaccinators recounted how they reached out to families and explained the benefit of vaccination to both parents. Although the mother is primarily responsible for bringing children for vaccination, it is usually the father who has the final say. If the father was not home, the community health volunteers would go back at another time. The process of identifying, tracking and following up with families where children had missed vaccines doses resulted in increased coverage. This personal interaction and counselling from someone who was part of the community was appreciated by families.

Community engagement activities held in crowded marketplaces reached many caregivers. Siah Mulbah from Doe community was a first-time mother. When she took her baby to the health centre for his first vaccines, the health worker seemed busy and she was scared to ask too many questions. She did not fully understand why vaccines were important or what diseases they could prevent. After participating in the outreach activities in the marketplace, she understood how vaccines could protect her newborn baby and made up her mind to have him fully vaccinated before his first birthday. Lassana Swaray, father of an eight-month-old, shared that he had not been involved in his child's health care until he happened to see musicians prepare for a community engagement event in Duala market. He decided to join in the fun, left with useful information on childhood vaccines, and decided to share it with his family and neighbours.

Sustainability and the scale-up of these projects depend on funding and require considerable investments in human resources, primarily the training and recruitment of CHVs, social mobilizers and vaccinators. The lessons learned from these projects also point to the importance of contextual factors such as the transportation costs of caregivers as well as the fuel costs for providers. Lack of rain gear made outreach efforts challenging during the rainy season. For the LNCB, fear of being infected with COVID-19 impacted both service provision and uptake.

Both projects aimed to reach the 'last mile' of under-served populations and specifically focused on disadvantaged urban groups. This case study shows how focused and short-term efforts can result in rapid improvements in vaccine coverage. It also shows the importance of coordinating delivery of different essential services and the efficacy of community engagement and demand generation. Collecting data disaggregated by sex, income and education would aid in understanding how vaccine inequities are being addressed, and would facilitate scaling up of projects.

A systematic assessment is required to see if male engagement in children's health, including immunization, is changing and if there are shifts in household discussions and decision-making about immunization. Some behaviours to track include whether or not fathers are bringing their children or accompanying their wives for vaccination visits; fathers who promote immunization and remind their wives to follow the schedule; and mothers who feel confident to make immunization and health decisions on their own.

This intervention addressed the needs of working mothers and fathers through extended hours and integrated one-stop services. Efforts were made to engage fathers and share childcare responsibility between parents. Female and male vaccinators, social mobilizers and volunteers were recruited to respond to the needs of women and men in the community. The initiative also supports investments in the short-term intensive outreach efforts to accelerate immunization coverage and reduce dropout. The service delivery and demand generation were well coordinated. These are important considerations when planning gender-responsive immunization efforts in the future.

Valuable contributions and support for this case study were provided by Musu Deshield, Amanda Gbarmo-Ndorbor and Eric K.O. Amankwah from the SBC team in UNICEF Liberia. This case study draws on secondary data review of available documents and interviews with the UNICEF SBC team and a selected sample of service providers (County Health Teams, supervisors, vaccinators) along with male and female project beneficiaries.



# Case study 2

# Promoting male engagement in immunization through Model Families in Mozambique

"My family was certified as a model family in 2018 because we adopted healthy practices. Every father wants his children to grow up strong and healthy, but we have responsibilities. One of them is to support the woman in the care of the children ... Paying attention to the dates on the calendar for the next vaccination doesn't take up much time. Even if the mobile health brigade doesn't come, I will do everything so that the child can get the vaccines on time."

Elisário Agostinho, Gurué District, Zambézia

### **Background and context**

National immunization coverage in Mozambique, as reported in the past five rounds of the Demographic Health Survey (DHS), rose from 47 per cent in 1997 to 66 per cent in 2015 (see **Figure 10**) with disparities in access and coverage across provinces. The percentage of children who receive three doses of the combined diphtheria, tetanus and pertussis vaccine (DPT3), the tuberculosis vaccine (BCG), and the first dose of the measles vaccine (MCV1) are above global and regional coverage levels for Eastern and Southern Africa.<sup>17</sup> Current estimates show BCG coverage at 79 per cent, DTP3 at 69 per cent and measles-rubella (first dose) at 84 per cent.<sup>18</sup>





Source: DHS 1995-2015

<sup>17</sup> UNICEF. (2021). Child Situational Analysis Mozambique. UNICEF Mozambique

<sup>18</sup> WHO/UNICEF Estimates of National Immunization Coverage (WUENIC). (2021).

Immunization coverage is higher in the south than the north, with the exception of Cabo Delgado. This is consistent with other data showing that the northern provinces of Nampula, Tete and Zambézia had poorer service provision and lower immunization coverage (under 55 per cent) than Maputo, Gaza, Inhambane and Cabo Delgado which have over 80 per cent coverage (see Figure 11). Variations are also noted across wealth quintiles, with families in the lowest quintiles much less likely to vaccinate their children (53 per cent) than those in the highest (85 per cent). In addition, children whose mothers had secondary education are more likely to be vaccinated (85 per cent) compared to those with less education (53 per cent).<sup>19</sup> In 2020, Mozambique had an estimated 186,000 zero-dose children measured as those who didn't receive any DPT1.20

**Figure 11.** Percentage of children aged 12-23 months who received all basic vaccines



Source: DHS 2015

The under-five mortality rate declined gradually from 1975 and accelerated following the end of the civil war in 1994. The 2017 census shows a rate of 73 per 1,000 live births, down from 97 per 1,000 in 2011. Among poor, rural populations, rates average 115 per 1,000 births, compared with 87 in urban areas.<sup>21</sup> Infectious and vaccine preventable diseases (VPDs) such as malaria, acute respiratory infections, pneumonia, diarrhoea and malnutrition are among the main causes.<sup>22</sup> The COVID-19 pandemic impacted delivery of basic services, with declines in immunization, treatment of severe acute malnutrition and vitamin A supplementation. The conflict in the northern part of the country has also impacted health services.<sup>23</sup>

### **Gender barriers**

Mozambique is ranked 127th out of 162 countries in the United Nation's Development Programme's Gender index.<sup>24</sup> The Constitution of Mozambique grants equal rights to women and men, and the country is a signatory to all international conventions on women and children's rights. However, gender equality is not practiced by customary law or reinforced by social norms. Men are considered to be household heads and breadwinners while women are seen primarily as caregivers.

<sup>&</sup>lt;sup>19</sup> Ministério da Saúde (MISAU), Instituto Nacional de Estatística (INE), and ICF. (2019). Survey of Indicators on Immunization, Malaria and HIV/AIDS in Mozambique 2015: Supplemental Report Incorporating Antiretroviral Biomarker Results. Maputo, Mozambique, and Rockville, Maryland, USA: INS, INE, and ICF.

<sup>&</sup>lt;sup>20</sup> WHO/UNICEF Immunization Coverage Estimates 2020 revision (completed 15 July 2021).

<sup>&</sup>lt;sup>21</sup> UNICEF. (2021). Child Situational Analysis Mozambique. UNICEF Mozambique.

<sup>&</sup>lt;sup>22</sup> UNICEF. (n.d.). Children in Mozambique: Early Years. UNICEF.

<sup>&</sup>lt;sup>23</sup> UNICEF (2020). Country Office Annual Report: UNICEF Mozambique.

<sup>24</sup> UNDP. (2020). The Next Frontier: Human Development and the Anthropocene. Briefing note for countries on the 2020 Human Development Report.
Low levels of education, high maternal health risks, pressure to marry at a young age, limited economic prospects, gender-based violence, and accepted patriarchal norms all place women at a high disadvantage. Few girls finish primary school (46 per cent) or secondary school (22 per cent), and 56 per cent of women are illiterate (upwards of 70 per cent in rural areas).<sup>25</sup> Mozambique has a high rate of child marriage, with almost one in every two girls aged 20–24 married or in a union before the age of 18.<sup>26,27</sup> Early marriage and motherhood impact girls' skills, awareness and decision-making in all spheres of life, including their health and the health of their children.<sup>28</sup> Families tend to have many children, often closely spaced, and need to make frequent visits to the health facility for both routine care and illness.

Interviews with caregivers revealed several barriers to vaccination. These include distance to health facilities, poor roads and the high cost of public transport. Facilities tend to be crowded and visits often result in losing a day's wages, forcing families to choose between vaccinating a child or having food. As a mother from Lugela District stated: "Either I go to the farm to produce and sell the products in the market, or the other children are left without means to eat or study." Likewise, where fathers are the breadwinner, taking a day off from farming or fishing means loss of income or less food on the table. Unfortunately, since the beginning of the COVID-19 pandemic, visits by mobile health brigades have been less frequent.

### Figure 12. Caregiver, Gurué, Zambézia



<sup>&</sup>lt;sup>25</sup> USAID. (2019). Gender equality and female empowerment: Mozambique Factsheet.

<sup>&</sup>lt;sup>26</sup> Ministerio da Saude (MISAU), Instituto Nacional de Estatística (INE) e ICF International (ICFI) (2011). Moçambique Inquérito Demográfico e de Saúde 2011. Calverton, Maryland, USA: MISAU, INE e ICFI.

<sup>&</sup>lt;sup>27</sup> UNICEF. (2019). Case study on ending child marriage in the Republic of Mozambique. UNICEF Eastern and Southern African Regional Office.

<sup>&</sup>lt;sup>28</sup> UNICEF. (2021). Child Situational Analysis Mozambique. UNICEF Mozambique.

There is a widespread perception and practice that mothers are primarily responsible for caring for young children. Men who perform tasks typically assigned to women are seen as weak and ridiculed by the community. However, men hold the decision-making power and decide whether or not their children should get vaccinated. At times, husbands do not trust their spouses and accuse them of spending time with other men when they take a long time at the health facility and come home late. A member of a Community Health Committee (CHC) explained that some men may want to take their children for vaccinations, but fear being made fun of by other men or being seen as weak. "This way of being seen inhibits us, and prevents us from supporting our wives, even if we feel like it, just to keep our good name. But it is our wives and children who suffer the consequences."

Polygamy is on the decline, but it is estimated that 17 per cent of women and 8 per cent of men are in polygamous unions. The pressure of supporting large families affects both spouses. Costa dos Santos, a father of seven with two wives, explained the difficulties men face in taking children for vaccinations. "All men want their children to grow up strong and healthy. The less sick they get, the less time and money is spent in the family caring for the sick. The difficulties begin when we have to make sure we earn something to put on the table. The work in the field takes time, selling products requires time and presence, and there isn't always time left over to support our wives as we should. The seven kilometres to the nearest health unit is an arduous journey." Another interviewee explained how women fear their husbands will seek an additional wife if they plan a smaller family size. This leads to having closely spaced children and adds to women's childcare burden.

A 42-year-old mother of five from Zambézia Province recounted the challenges for families whose children faced disabilities or chronic diseases. She has a nine-year-old daughter who suffers from epilepsy. She wants her child to be healthy but walking to the nearest facility with the child on her back is difficult and she doesn't have the money for transportation. Her daughter's condition impacted not just her health but also her school attendance and performance.

Previous research confirms the evidence from these testimonies. A gender assessment by USAID highlighted that men are expected to be the household decision-makers on all matters, including health, and generally do not accompany their female partners to prenatal, maternal health, or child health consultations. Often the husband or mother-in-law will make the decision about whether to deliver in a hospital and when it is appropriate to seek medical care. When a woman or her child is sick, or sometimes even when she needs to attend well-baby visits, she often needs to wait for the husband or her in-laws to decide if it is serious enough to go and see a doctor. Access to quality health services for women is often impeded by health-care providers who prioritize male clients or female clients who bring their male partners with them.<sup>29</sup>

A study on knowledge, attitudes and practices in immunization showed that women viewed vaccines as preventive and protective but were unable to distinguish between vaccines and did not fully understand the seriousness of the diseases or the importance of following the schedule. The same study highlighted how facility staff often mistreat women and chastise them for not following the schedule, sometimes confiscating the vaccine card or ordering them to weed the health facility grounds. Female caregivers said they did not feel confident to ask health workers for information or negotiate with their husbands about their children's vaccination. Ill treatment was a stronger barrier to accessing health services than distance or waiting time. In some cases, women could not bring their children because they did not have their husband's support. Men complained if they returned late and household responsibilities like preparing food

<sup>&</sup>lt;sup>29</sup> USAID. (2019). Gender Assessment for USAID Mozambique Country Development Cooperation Strategy Final Report. USAID.

were neglected. This study also indicated that women who adopted or raised children of relatives (a frequent practice in Mozambique) faced difficulty in completing routine vaccination, possibly due to the burden of looking after an additional child.<sup>30</sup> The Ministry of Health is conducting after service exit interviews with caregivers to assess their experience of care.

# **The intervention – Model Family Initiative**

UNICEF supported the Government of Mozambique to develop the National Health Promotion Strategy 2015–2024. It included an innovative Model Family approach to improve child health outcomes through an integrated package of health, hygiene, sanitation, education and protection practices while fostering a shift in gender norms. Community Health Committees implement the initiative and verify adoption using government-endorsed criteria.

A family is certified as a Model Family if it adopts at least 10 out of the 13 (or 80 per cent) recommended practices (see **Table 5**). The focus is on behavioural outcomes that are observable and can be verified by the CHCs. Immunization is one of the key practices included in the package. Social change and transforming gender norms are a key part of the implementation but are not included as criteria for certification.

Practice	Indicators		
Use of latrines	Are you using a latrine that has a lid, demarcation perimeter, ceiling and door? (It could be done with local materials.)		
Handwashing with soap or ashes	Do you have a tap with running water or a tip tap consisting of a bidon, rope, bracket and pedal for handwashing with soap or ashes?		
Use of mosquito net	Is there a mosquito net in use on each of your beds or mats?		
Safe water storage	Do you have a safe water treatment and storage system? (Reservoir with lid – can be a jerrycan, pot, drum, tank, etc.)		
Hygiene and sanitation	Do you have a table or a stand for drying dishes? (The table can be made of local material.)		
	Do you have a holder for your grinding stick?		
	Do you have a sanitary landfill?		
Under-five health card	Is the information on the health cards of your under-5 children regularly updated (vaccinations, weight, vitamin A and deworming)?		
Nutrition	Do all your under-5 children have at least three meals per day (with local products)?		
Family planning	Do you use modern contraception methods/family planning?		
Antenatal care	If you are a mother of a child under 1 year old: have you attended at least four antenatal visits during pregnancy and post-partum consultations?		
School enrolment	Do all your children above 6 years of age go to school? If not, did those who are not attending school complete seventh grade?		
Birth registration	Do all your under-5 children have birth registration certificates?		

### Table 5. Model Family Practices

Source: UNICEF Mozambique

<sup>&</sup>lt;sup>30</sup> UNCEF. (2013). Has your child been vaccinated? Knowledge, Attitudes and Practices (KAP) Rapid Assessment study on adherence to vaccination in the context of the introduction of new vaccines. Ministry of Health and UNICEF, Mozambique.

The CHC, with about 15 members selected by the community, is an independent and voluntary group, not affiliated with the official health system. Members include community health workers, community leaders, traditional healers, religious leaders, community health workers known as Agentes Polivalentes Elementares (APE), members of the water subcommittees and midwives. Efforts are made to include representatives from different groups, including traders, teachers and marginalized groups. The CHC is divided into smaller working groups for i) health and nutrition education; ii) women and children's health; iii) water, environment and sanitation, and iv) economic development, housing and food production.

It is recommended that at least 60 per cent of CHC members be women. Members conduct home visits and organize community dialogues on issues related to the practices, including the need for male engagement on maternal and child health. They verify health cards and monitor to see if families are meeting the criteria (**Figure 13**). The immunization calendar is shared with both parents, and they are reminded to come to the health facility when immunizations are due. Family planning is also discussed with both partners. Attempts are made to increase spousal dialogue across health issues.

## Figure 13. Model Family Certification Process



A team with male and female representatives conducts the verification, which is scheduled at a time when both partners are home. When families meet the criteria and are certified as a Model Family, a community-level recognition celebration is held, allowing for the family to be publicly recognized and inspiring other families to adopt the recommended practices. Having men and women as part of the CHCs is a novel approach and is intended to address the fact that women in the community have not had equal rights or representation. This allows men and women to come together and discuss family and community issues and encourages women to be seen as respected and equal members of the community.

The Model Family Initiative is part of a broader programme of Social and Behaviour Change (SBC) interventions led by UNICEF Mozambique to promote an integrated package of life-saving behaviours and protective practices that address gender and social norms through a combination of channels. For instance, videos and community theatre promote male engagement, positive parenting and sharing of childcare responsibilities. Situations are simulated to illustrate the need for women to make independent decisions regarding their own or their children's health. Although issues such as violence and child marriage are discussed in community dialogue sessions, the focus of the intervention is on healthy behaviours.

Model Family practices are reinforced by other community platforms such as radio, theatre, the engagement of religious leaders and broadcasts of the national edutainment radio drama *Ouro Negro* (Black Gold). *Ouro Negro* includes several episodes that focus on engaging fathers. In one, a character, *Chefe Olimpio* wins a 'Real Father' competition for his knowledge and support for children's health. In another, *Chefe Olimpio* discusses children's health and well-being with a large group of fathers at a local shack (*barraca*). Partnerships have been established with community theatre groups to conduct 'Theatre of the Oppressed'-influenced drama. Religious leaders are engaged to promote family practices and connect them with messages in the Bible and the Qur'an. In an effort to link traditional and formal medicine, traditional healers are trained in essential family practices and are provided with cards to refer people to health facilities. Community dialogues with women's groups, fathers' groups and young people had to be suspended due to COVID-19 but have been reinstated and will continue during national scale-up. Awareness-raising efforts include involving leaders and administrators to record messages promoting male engagement and gender equality and sharing these on community radio.



#### Figure 14. Female Community Health Team Member, Lugela

## Scope and coverage

The Model Family programme is supported by different donors. Since 2015, UNICEF has supported the training of CHCs in eight districts of Nampula and eight districts of Zambézia Province. The initiative was expanded to six districts of Sofala Province in 2021. At the time of writing, a total of 37,365 families have been certified in the three UNICEF-supported provinces. The initiative was scaled up in 2021, with 21,387 families certified (see **Table 6**).

The initiative is being implemented in Inhambane Province with the support of the Catalonia Cooperation and Development Agency. The Ministry of Health has approved and promoted the initiative in all provinces, but the capacity-building of CHCs has not been conducted due to resource constraints. The approach is planned to be scaled up nationwide by 2024, contingent on funding.

#### Table 6. Distribution of Model Families supported by UNICEF

Province	2018	2019	2020	2021
Nampula	652	3,675	2,117	9,955
Zambézia	1,946	4,192	3,396	3,215
Sofala	-	-	-	8,217

Source: UNICEF Mozambique

Community Health Committees are endorsed by the government and implemented nationwide. Currently 2,100 CHCs are operating in the three provinces (see **Table 7**), of which 617 have been trained with UNICEF support to implement the Model Family Initiative. Other CHCs are trained on specific health issues such as malaria, TB and HIV by partners such as Malaria Consortium, World Vision, Save the Children, FHI 360, Inter Aid, UNFPA and Mozambican NGO Aid for the Development of People for People.

#### Table 7. Community Health Committees trained by UNICEF

Province	CHCs trained on Model Families	Total
Nampula	310	1,023
Zambézia	119	839
Sofala	188	247

Source: UNICEF Mozambique

## **Budget**

From 2017 to 2021, UNICEF provided a total of US\$417,000 to support the initiative in the three provinces. This is a national initiative and other donors are supporting Model Families in other provinces.

## Timeline



# Achievements

This Model Family Initiative seeks to address gender inequalities at the household and community levels. The formation of CHCs with a majority or at least equal ratio of females to males ensures women and their perspectives are represented. The emphasis on male engagement and sharing of household responsibilities aims to shift gender roles and perceptions of what is typically considered a male or female responsibility. Spousal communication and shared decision-making are encouraged. The initiative focuses on disadvantaged groups and the provinces where the initiative has been implemented, particularly Nampula and Zambézia, have lower vaccine coverage and higher levels of poverty than other provinces. The certification process, linked to adoption of at least 80 per cent of the observed behaviours demonstrates uptake of family practices, including completing immunization. Progress has been made to achieve the target of certifying 50,000 families during the 2016–2021 Country Programme of Cooperation (see scope and coverage section).

This initiative is contributing towards gender equality. Interviews showed that within households, men – particularly younger ones – are beginning to recognize the heavy burden of childcare on women and are coming forward to support them. According to a father whose family has been certified as a Model Family, "it's a matter of awareness and taking your responsibility as a father. What is common among men here is not paying attention to child rearing, especially for older men. ...We young men are aware that because of the overload our wives face, they need support and collaboration."

Community members are discussing both health and social issues. Women were traditionally not part of community dialogues and did not have a public role. Seeing women as part of the CHC or as community health agents (APEs) is also a change. As Elisa Xavier Mutando, a female committee member, puts it, "I am pleased to see that our district is led by a woman. We have a female administrator, who is a strong woman ... and this inspires all of us women of Lugela, it shows how we are capable of making valuable contributions."

In Sofala Province, two indicators – acute watery diarrhoea (AWD) and malaria – were selected to assess the impact of the Model Family Initiative. Both illnesses are among the leading contributors of child mortality and are linked to multiple recommended practices (e.g., handwashing, latrine use, use of nets). Initial data show a decrease in the number of cases of AWD across several districts (see **Table 8**). While data on uptake of vaccines linked to the initiative are not available, and attribution is not possible, decreases in preventable diseases are an indicator that the intervention is contributing to improved health outcomes.

District	October – December 2020 (Before implementation)	October – December 2021 (After implementation )
Dondo	209	138
Nhamatanda	564	355
Búzi	366	141
Muanza	152	78
Chibabava	76	23
Gorongosa	409	361
TOTAL	1,857	1,096

### Table 8. AWD cases reported at health facilities

Source: UNICEF Mozambique

A comprehensive evaluation of the initiative has not been conducted, but there is qualitative evidence from the three districts that gender-related shifts are beginning to take place. For example, men from Muanza-Sede Administrative Post in Sofala Province are becoming more active and involved in their children's health care. Monitoring reports highlight that health facilities are increasingly seeing men accompany their wives and children for regular and emergency vaccinations. Take the case of Mateus Ernesto Gecente who holds his child while he is getting vaccinated and proudly tells us, "My wife and I are responsible for the health of our children. This is not a common practice in my community, and other men have been looking at me strangely. I recognize that participating in the health of our children is important and I want to share it with the community." CHC members are noticing that over time more men are sharing domestic responsibilities with their wives. However, this change is slow and at times women themselves are resistant and men tend to take their children to the health centre only if the woman cannot take the child.



### Figure 15. Father taking a child for vaccination

The government is trying to increase the proportion of female APEs. Recruitment and retention of APEs are influenced by prevailing gender norms, roles and relations. For instance, female APEs found it difficult to attend residential trainings away from their children and male APEs found it challenging to provide for their families during trainings.<sup>31</sup> The APE visits homes to remind families about practices and to verify if schedules are being followed. When families have any health problems, they contact the APE. He/she is part of the community health structure, has a kit and can provide basic medicines. The APE can also refer families to the health facility. They are an important link between families and the health system, and engaging women allows for women's needs and perspectives to be better understood.

## **Lessons learned and recommendations**

The Model Family Initiative and the CHCs have been endorsed by the government and are part of the health promotion system. This is an innovative means of creating a national structure that is implemented and monitored by community-based groups. CHCs are familiar with community practices as well as myths and taboos and are well positioned to address both sensitive issues and local challenges.

<sup>&</sup>lt;sup>31</sup> Steege, R., Taegtmeyer, M., Ndima, S. et al. (2020). Redressing the gender imbalance: a qualitative analysis of recruitment and retention in Mozambique's community health workforce. Human Resource Health 18, 37.

Promoting an integrated package of life-saving practices can lead to gains across multiple health outcomes and promote health-seeking behaviours for children and caregivers. When parents take one child to the facility they are counselled on the entire package of practices. For example, a young girl shared how her mother found out about the human papilloma virus (HPV) vaccine while taking her youngest sister for weight monitoring. She explained that her mother saw the poster, noted the date of the campaign and took her older daughter. A KAP study showed that caregivers see different health practices as closely linked. For instance, women associated routine immunization with weight monitoring and referred to immunization visits as part of 'weighing the child'. Likewise, the baby's health card was perceived as a passport for accessing the health system, not just an instrument for recording vaccinations.<sup>32</sup>

The Model Family Initiative is an innovative approach included in the National Health Promotion Strategy and the Ministry of Health is committed to expanding the initiative to all provinces. Dra Laurinda Ângela, Focal Point for Community Engagement, Health Promotion Department, MOH, states:

"The family is the fundamental element and basis of the entire Mozambican society. Most health problems start in this family environment and good health is crucial for the family to be able to provide, nourish and care for its members. The Model Families approach enables community structures to promote the adoption of behaviours at the family level. We are currently making many gains due to the implementation of this approach, taking as an example the provinces of Nampula, Sofala, Inhambane and Zambézia. With the implementation of this approach at the national level, many diseases that are preventable through individual and collective hygiene and vaccination would be reduced."

This approach has the potential to promote broader-level social change by challenging gender norms within households and communities. Community leaders are mostly men and sensitizing these key influencers can in turn sensitize other men. This leads to the change diffusing to the entire community. Male involvement can positively impact maternal and child health, distribution of domestic responsibilities, negotiation on family planning choices, education and managing family resources. Establishing criteria for "Model Fathers" with clear behavioural outcomes and publicly recognizing role-model fathers will increase the gender-transformative potential of this intervention.

The engagement of local government authorities and the community-level participation generated by this initiative can be leveraged for broader-level social change that goes well beyond the 13 practices, setting up a platform for community-based action and leadership. The main barrier to scale-up and expansion to all provinces is the lack of financial resources.

An operational research study is planned in 2022 to understand:

- Why and how the certified families adopted the desired behaviours and how the practices will be sustained;
- 2) How certified families are inspiring or motivating other families in their communities and how the programme can facilitate the scale-up of such peer-to-peer exchange;
- 3) The underlying causes and barriers that prevent the adoption of healthy behaviours among uncertified families.

<sup>&</sup>lt;sup>32</sup> UNICEF. (2013). Has your child been vaccinated? Knowledge, Attitudes and Practices (KAP) Rapid Assessment study on adherence to vaccination in the context of the introduction of new vaccines. Ministry of Health and UNICEF, Mozambique.

A comprehensive assessment of what changes in gender norms, roles and relationships is taking place as a result of the Model Family Initiative, and the engagement of CHCs will generate valuable evidence for future adaptations and scale-up. Extracting immunization data (from the vaccination card that certified Model Families have) will help establish a direct association between the initiative and vaccine uptake. Both intended and unintended consequences must be considered. There is a need to include gender-specific indicators to better understand how power dynamics are changing and if women are gaining agency or control in decisions on different aspects of their lives. There is also a need to assess if male engagement in maternal and child health is increasing. Behaviours to track male engagement could include the proportion of men accompanying their spouses for antenatal or postnatal care visits, fathers bringing children for vaccines or wellness visits, men who are investing in building latrines at home, helping with household chores and children's schoolwork.

Although the Model Family Initiative promotes sharing of responsibilities within traditional family units, it is important to understand how health and protective practices are adopted by single-parent and polygamous families or where children are being raised by adopted families, grandparents or relatives. It is also important to understand if there are differences in the adoption of practices or uptake of vaccines based on the gender of the child and to study how factors such as wealth, ethnicity, religion and ability intersect with gender.

Promoting male engagement across health, sanitation and education practices has the potential to benefit multiple aspects of child development and promote intergenerational change and role modelling within families and communities. This is a promising approach that can contribute to changes in specific health behaviours while also bringing about broader-level change in gender norms and discriminatory practices.



Valuable contributions and support for this case study were provided by Aida Mahomed, Mario Lemos and Maltez Mabuie from the SBC team and Rossella Albertini, gender focal point at UNICEF Mozambique. This case study draws on secondary data review of available documents and primary data collected through a selective sample of interviews with caregivers, model families, adolescents and health committee members in Gurué and Lugela, Zambézia Province and in Muanza, Sofala Province.



# **Case study 3**

# Leveraging digital media insights to increase demand for immunization in Pakistan

"My husband works as a day labourer and is often away from home... it is never easy for me to take my children to the hospital using public transport. When I heard that a vaccination team would be coming to our neighbourhood, I was excited as I knew it would save me a lot of time and effort. The feeling that comes with knowing that once vaccinated, my children will be safe from disease, is priceless."

A mother from Khyber Pakhtunkhwa Province<sup>33</sup>

## **Background and context**

Pakistan has the highest under-five mortality rate in South Asia, surpassing Afghanistan, India and Bangladesh.<sup>34</sup> About 65 out of every 1,000 children born do not live beyond the age of five. In 2020, 244,029 newborns died during their first month and 140,269 infants died before the age of one.<sup>35</sup> Newborn, infant and maternal mortality are linked to poor health care, missed immunization, and suboptimal nutrition. Unequal access to health care is related to gender, geography, education and wealth.<sup>36</sup>

The Expanded Programme on Immunization (EPI) in Pakistan began in 1976 with six antigens – tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus and measles. The programme was expanded nationwide in 1978. Additional vaccines were introduced –hepatitis B in 2002, haemophilus influenzae type b (Hib) in 2009, pneumococcal vaccine (PCV) in 2012, inactivated polio vaccine in 2015, and rota vaccine in 2017. Measles vaccine is currently being replaced by measles-rubella (MR), which also protects against rubella and congenital rubella syndrome.<sup>37</sup> Pakistan was the first country to introduce typhoid conjugate vaccine (TCV) into its routine immunization programme in 2019. Nearly 10 million children were vaccinated in Sindh province alone that year.<sup>38</sup> Recognizing the critical role of immunization in reducing child and maternal morbidity and mortality, the Government of Pakistan has developed a national immunization Policy (2022) to reduce VPDs for infants, children, adolescents and mothers as part of routine outbreak response and in campaigns, and for all eligible population during pandemics and emergencies.<sup>39</sup>

<sup>&</sup>lt;sup>33</sup> UNICEF. (2021). Millions of Children Vaccinated against Typhoid in Pakistan. UNICEF Pakistan.

<sup>&</sup>lt;sup>34</sup> UN Interagency Group for Child Mortality estimation.

<sup>&</sup>lt;sup>35</sup> UN IGME. (2021). United Nations Inter-agency Group for Child Mortality Estimation.

<sup>&</sup>lt;sup>36</sup> UNICEF. (2021). Country Office Annual Report. UNICEF Pakistan.

<sup>&</sup>lt;sup>37</sup> Expanded Programme on Immunization: Background. (n.d.). Government of Pakistan. Background.

<sup>&</sup>lt;sup>38</sup> UNICEF. (2021). Millions of Children Vaccinated against Typhoid in Pakistan. UNICEF Pakistan.

<sup>&</sup>lt;sup>39</sup> Pakistan National Immunization Policy (2022). Ministry of National Health Services, Regulations and Coordination

At present, the EPI covers 12 VPDs. The programme targets almost 7.5 million children annually and approximately the same number of pregnant women against tetanus. Immunization may avert up to 17 per cent of childhood mortality in Pakistan.<sup>40</sup>

According to the Third-Party Verification Immunization Coverage Survey (TPVICS), 76.4 per cent of children aged 12–23 months were fully vaccinated, and 18 per cent partially vaccinated, while 6 per cent were not vaccinated at all. The national coverage is at 83.5 per cent for Penta 3 immunization and 93.3 per cent for BCG. The rates of fully immunized children (FIC), BCG vaccinated and Penta 3 vaccinated were similar for females and males.<sup>41</sup>

TPVICS findings reflect improvement in immunization coverage compared to previous surveys such as the Pakistan Demographic and Health Survey 2018, which showed coverage of 66 per cent. However, coverage varies among different vaccine antigens, and between provinces, ranging from 38 per cent in Balochistan to 89 per cent in Punjab (see Figure 16).



## Figure 16. Percentage of fully immunized children by provinces

Source: TPVICS, 2021

Immunization coverage and maternal education level were found to correlate positively. The FIC percentage was 68 per cent for children with mothers who had no formal education compared to 87 per cent for children whose mothers had completed secondary education. The rate was similar in urban (77 per cent) and rural (76 per cent) areas.

Immunization coverage varied by wealth quintile. FIC was recorded at 54 per cent among the children of the poorest quintile, compared to 84 per cent for the wealthiest group.<sup>42</sup>

<sup>&</sup>lt;sup>40</sup> Expanded Programme on Immunization: Background. (n.d.). Government of Pakistan.

<sup>&</sup>lt;sup>41</sup> Aga Khan University. (2021). Third-Party Verification Immunization Coverage Survey.

<sup>&</sup>lt;sup>42</sup> Aga Khan University. (2021). Third-Party Verification Immunization Coverage Survey.

Pakistan and Afghanistan are the two remaining polio-endemic countries in the world. Pakistan's Polio Eradication Programme has resulted in a sharp decline in annual cases from approximately 20,000 in the early 1990s to only 84 in 2020. Polio eradication is a high-priority, large-scale movement with around 41.5 million children under five targeted at national immunization days and 338,000 frontline workers (62 per cent female) deployed.<sup>43</sup> As of June 2022, 14 cases of wild polio virus type 1 (WPV1) or circulating vaccine-derived polio virus type 1 (cVDPV2) cases were reported.<sup>44</sup>

Pakistan leveraged the large existing EPI and polio infrastructure for its COVID-19 vaccine rollout. A few months into the campaign, up to a million people a day were being vaccinated.<sup>45</sup> Gender disparity was noted in COVID-19 vaccine uptake, with women accounting for 40 per cent of the vaccinated population for the first dose compared to 60 per cent for men. Although slight improvements were observed for consecutive doses (see **Figure 17**), fewer women are vaccinated, both among the general population and frontline workers. Faisal Sultan, an infectious disease expert and Special Assistant to the Prime Minister on Health, reported that early vaccination figures showed a worrying gender skew, but over time, and with the deployment of more mobile vaccination units and female vaccinators, that gap has narrowed. Now, he says, "I think this is an example of a very fair, non-discriminant, equitable roll-out of a public good."<sup>46</sup>





Source: COVID-19 Vaccine Inventory Management System, EPI, Government of Pakistan

The pandemic led to a decline in routine immunization with an estimated 1.5 million children missing out on basic vaccines between March and May 2020.<sup>47</sup> Under the EPI recovery plan to mitigate COVID-19 impacts, UNICEF supported the birth-dose initiative with female-staffed vaccination centres in 32 hospitals open 24/7. 100,000 newborns (95 per cent of live births at these facilities) were vaccinated at birth, from a baseline of 8 per cent. UNICEF-facilitated vaccine procurement, social and behaviour change communication, technical assistance and field monitoring contributed to immunizing 94 million children (exceeding targets by 4 million) against measles-rubella nationwide, and 19.8 million against typhoid in Punjab.<sup>48</sup>

<sup>46</sup> Ibid.

<sup>&</sup>lt;sup>43</sup> Pakistan Polio Eradication Programme. (2022).

<sup>&</sup>lt;sup>44</sup> Polio Global Eradication Initiative (2022). Polio Now.

<sup>&</sup>lt;sup>45</sup> Prabhu, M. (2021). A million a day: Pakistan's COVID-19 vaccine campaign hits its stride. GAVI.

<sup>&</sup>lt;sup>47</sup> Prabhu, M. & Khawar, H. (2021). All aboard the vaccine minibus: getting immunisation back on track in Pakistan. GAVI.

<sup>&</sup>lt;sup>48</sup> UNICEF. (2021). Country Office Annual Report. UNICEF Pakistan.

Despite significant improvements and concerted efforts by the government and its partners, Pakistan's immunization indicators have yet to reach the expected benchmarks. The key goals of polio and measles eradication have not been achieved as the country experiences continued incidences of endemic polio transmission and periodic measles outbreaks. Among the reasons for low immunization coverage are limited access to services, lack of awareness among communities, low socio-economic status, parental education, and gaps in vaccination service delivery. The EPI is also hampered by its fragmented financing structure and lack of monitoring and evaluation system.<sup>49</sup>

UNICEF's comprehensive package of SBC activities to promote vaccine uptake has five main elements:

- 1. advocacy to address gaps faced by marginalized groups and women in accessing services;
- 2. mass media campaigns using radio, television and print platforms;
- 3. community engagement efforts leveraging the role of religious leaders, community influencers and elders;
- 4. door-to-door outreach through lady health workers, mobilizers and community resource persons (CRP);
- 5. digital and social media engagement as part of a concerted trans-media approach which works in close coordination with interpersonal outreach and community engagement.

This case study focuses on the fifth approach, the digital campaign and social listening component.

# **Gender barriers**

In Pakistan, young women and girls are less likely than boys and men to access basic services and have, on average, consistently lower development outcomes. Gender norms disproportionately impact their opportunities, mobility, pursuit of education, nutritional status and right to be protected from violence and harmful practices, such as child marriage. Girls represent a higher proportion of out-of-school children aged 5–16, are more likely to marry before the age of 18, and are less likely to receive treatment for illnesses, such as acute respiratory infections or diarrhoea. Boys are also disadvantaged by gender norms. For instance, boys under the age of two are more likely than girls to be stunted and wasted. Boys are also pulled out of school and pushed into the job market at a young age.<sup>50</sup>

Gender-based barriers to accessing primary health services, including immunization, include distance to or convenience of facility, access to means of transportation, income, availability of medical staff, gender discrimination and level of responsiveness of staff to patients' need, and service hours. For example, women with personal transport were 50 times more likely to access primary health-care (PHC) services compared to those who did not. In many areas, travelling long distances unaccompanied by a male family member is considered culturally unacceptable and gender-friendly transport facilities are not available. In addition, most facilities lack gender-segregated waiting areas and toilets.<sup>51</sup>

<sup>&</sup>lt;sup>49</sup> Aga Khan University. (2021). Third-Party Verification Immunization Coverage Survey.

<sup>&</sup>lt;sup>50</sup> UNICEF. (2017). Situation Analysis of Children in Pakistan. UJNICEF Pakistan and Government of Pakistan.

<sup>&</sup>lt;sup>51</sup> Ahmed, K.A., Grundy, J., Hashmat, L. et al. (2022). An analysis of the gender and social determinants of health in urban poor areas of the most populated cities of Pakistan. *International Journal for Equity Health* 21, 52

A study found that women accessed PHC services more often than men and that extended service hours positively impacted men's access. In many communities, men work during the day, while women have more flexibility and can adjust household activities to accommodate visits. In some cases where female mobility is restricted, men working on daily wages cannot take time off during the day to accompany their spouse and children for vaccination. Feeding the family takes precedence over preventive health care and vaccinations. Caregivers cannot afford transportation to distant BHUs or buying medicines in the case of side effects.<sup>52</sup> This points towards the need for flexible or extended service hours to accommodate men's working hours and address the expectation that men accompany women to health facilities.

Household power dynamics impact vaccination decisions. Husbands, fathers-in-law and mothers-in-law have more authority than mothers to make decisions regarding health care and immunization of children. Even if both caregivers agree on vaccinating their children, the elders may overrule them.<sup>53</sup> The most common reason cited for non-vaccination was not getting permission from family (33 per cent). Others included fear of side effects, lack of time and lack of knowledge of vaccination schedules. The desire to protect boys from illness or side effects related to vaccines could also be a plausible reason for not vaccinating boys.<sup>54</sup>

In certain communities where the purdah system is strictly practised, male vaccinators cannot vaccinate female children. Son preference also leads to less importance given to the health care of female children. Early marriage and child bearing and closely spaced children may mean less attention is given to an individual child's immunization. Consequently, when caregivers have many children, the lengthy immunization schedule becomes burdensome. Misinformation among caregivers is also a significant barrier. In some areas, entire communities refuse vaccination due to a community-wide perception that vaccination is unnecessary or may cause adverse effects (fever, pain, blood clots, etc.). There are also concerns about infertility, especially in female children.<sup>55</sup>

## Health workers' experiences

Gender norms impact both caregivers and service providers. Pakistan has introduced a large cadre of female health workers to overcome gender barriers to accessing healthcare. However, they face restrictions on mobility, and conflicts between domestic and work responsibilities. They are subject to gossip and social sanctions by family and community for working outside the home and interacting with men.<sup>56</sup> At work, they face hierarchical management structures, abuse of authority, disrespect and harassment from male colleagues, and poor infrastructural support. Health facilities do not provide gender-segregated washrooms or day care for children. Female health workers lack access to gender-friendly transportation or security, especially for distant and unsafe areas. Low salaries and a heavy workload result in low morale.<sup>57</sup>

<sup>&</sup>lt;sup>52</sup> Panezai, S, Ahmad, M.M., Saqib, S.E. Factors affecting access to primary health care services in Pakistan: a gender-based analysis. Development in Practice 2017;27(6):813-827.

<sup>&</sup>lt;sup>53</sup> Hashmat, L. & Khan, F. (2021). Gender-Related Barriers to Childhood Immunization in Pakistan: Perspectives of Healthcare Workers. Islamabad, Pakistan: Civil Society Human and Institutional Development Programme – CHIP.

<sup>&</sup>lt;sup>54</sup> Ahmed, K.A., Grundy, J., Hashmat, L. et al. (2022). An analysis of the gender and social determinants of health in urban poor areas of the most populated cities of Pakistan. *International Journal for Equity Health* 21, 52.

<sup>&</sup>lt;sup>55</sup> Hashmat, L. & Khan, F. (2021). Gender-Related Barriers to Childhood Immunization in Pakistan: Perspectives of Healthcare Workers. Islamabad, Pakistan: Civil Society Human and Institutional Development Programme – CHIP.

<sup>&</sup>lt;sup>56</sup> Mumtaz, Z., Salway, S., Waseem, M., & Umer, N. (2003). Gender-based barriers to primary health care provision in Pakistan: the experience of female providers. *Health policy and planning*, 18(3), 261–269.

<sup>57</sup> Hashmat & Khan (2021).

# The Intervention – Meta Insights informed gender-responsive immunization campaigns

This case study looks at how social media insights and evidence generated from the digital campaign have been used to inform demand-generation efforts and bolster female engagement and vaccine uptake for routine immunization, COVID-19 vaccine and the measles-rubella (MR) campaign. Despite the fragmented digital footprint, the number of social media users, specifically on WhatsApp, is increasing, especially in the wake of COVID-19 which restricted traditional forms of communication and social gathering. Meta insights showed that with tailored content, vaccination-related conversation indexes were higher for female social media users than for male users.

As of June 2022, Pakistan had 195 million cellular subscribers and 116 million Internet subscribers (see **Figure 18**). The Internet penetration rate is around 53 per cent and is growing rapidly.<sup>58</sup> As of January 2022, Pakistan had 71.70 million social media users (31.5 per cent of the population), with 43.55 million using Facebook. Facebook's ad reach was 52.5 per cent of the Internet user base – 19 per cent female and 81 per cent male. There are 13.75 million Instagram users with an ad reach of about 6 per cent.<sup>59</sup>



## Figure 18. Telecom indicators as of June 2022

Source: Pakistan Telecom Authority

UNICEF has partnered with Facebook and its parent company Meta Platforms to tailor content to combat vaccine hesitancy and increase routine immunization coverage in 10 countries including Pakistan. Data insights were provided by Facebook's Insights for Impact (I4I) team on vaccine-related public narratives, with a specific gender focus, to develop gender-responsive messages and content.<sup>60</sup> The I4I model involves an iterative process generating evidence to design vaccine outreach campaigns, as illustrated in **Figure 19**.

<sup>58</sup> Pakistan Telecom Authority: Indicators. (2022).

<sup>&</sup>lt;sup>59</sup> Digital 2022: Pakistan. Datareportal

<sup>&</sup>lt;sup>60</sup> UNICEF. (n.d.). Strategically augmenting female participation in vaccine-related conversation in Pakistan, UNICEF Pakistan.

#### Figure 19. Insights for Impact Model

#### **Determine research questions**

Meta partners with a limited number of partners on Insights for Impact, focused on answering specific research questions such as those related to increasing routine immunizations

#### **Conduct brand lift study**

Campaign survey to people who saw the ads and those who did not, and calculate any statistically significant effects on reported behaviour change driven as a result of the campaign

#### Analyse public posts

Using machine learning tools for natural language processing, we sort through billions of public posts to find those related to specific topics

#### **Design outreach campaigns**

Post analysis can reveal differences in how men, women,as well as young and old people engage and talk about a topic. Using these insights, we design campaigns unique to particular audiences

Source: Building vaccine confidence amid COVID-19 with UNICEF, Meta Platforms, 2021

Public Facebook posts about vaccines were analysed and the effectiveness of different content, messages and messengers in changing behaviours was tested. A Brand Lift Study to test new content was conducted by comparing test (those exposed to messages) and control (those not exposed to the messages) groups.<sup>61</sup> Respondents were asked whether they remembered seeing an ad from UNICEF recently, followed by questions relating to awareness, attitude, and willingness to vaccinate.<sup>62</sup> The project involved three stages – analysis of public posts, developing and running the campaign, and measuring impact (see Figure 20).<sup>63</sup>





<sup>61</sup> Brand Lift Study measures the value and performance of Facebook advertising. A representative sample of people eligible to see the advertising is selected, then randomly divided into test and control groups, and causal inference techniques are used to measure the impact of advertising. The difference in performance between the test and control group represents the lift of Facebook advertising.

<sup>62</sup> Kadeem Khan. (2021). Building Vaccine Confidence Amid COVID-19 With UNICEF. Meta Platforms.

<sup>63</sup> UNICEF. (2020). Amplifying immunization efforts during the COVID19 pandemic: UNICEF Pakistan Insights for Impact Project with Facebook. UNCEF Pakistan. UNICEF has supported the Federal Directorate of Immunization and Provincial EPIs in the design and development of evidence-based communication material building on social media insights which was disseminated through mass (television, radio, cable networks, and print mediums) and digital media. Targeted automated calls in local languages were used in Union Councils (UCs) with low coverage. Digital billboards and streamers, extensive community engagement and social mobilization, interpersonal training of health-care workers, and third-party field monitoring among other activities were supported. Technical support was provided to the government for the digital campaign and included website development, management of social media accounts, and oversight for the social listening component to measure impact.

UNICEF has also partnered with civil society organizations (CSOs) to gather evidence through social profiling to plan targeted social mobilization and community engagement efforts in priority areas with a high number of children with zero or missed doses. A diagnostic tool based on the global human-centred field guide on demand for health services was used to identify community-level barriers, perceptions, preferences, influencers and decision-makers.<sup>64</sup> Data are used to inform communication action plans at the UC level and are aligned with district-level action plans. So far social profiling has been conducted in selected UCs in 46 districts. **Figure 21** illustrates some key findings from social profiling in two provinces.

## Figure 21. Examples of social profiling insights



<sup>64</sup> UNICEF. (2018). Demand for Health Services: A Human-Centred Field Guide for Investigating and Responding to Challenge. UNICEF Programme Division, New York.

Multiple campaigns and three Brand Lift Studies were conducted to tailor and improve EPI's digital media outreach with a focus on increasing engagement among young parents, especially mothers, to disseminate key messages to their social media followers. These included campaigns for COVID-19, routine immunization, MR and TCV vaccines and World Immunization Week 2022. Based on the success of the TCV and COVID-19 campaigns, digital and social media listening were undertaken for the MR campaign through Keyhole, CrowdTangle, and Synthesio to track real-time conversations and gauge public sentiments. Positive/pro-vaccine content was developed to address public concerns (see Figure 22).

#### Figure 22. Example of digital media insights



Source: UNICEF Pakistan

Some highlights of the insights-based campaigns are:

## Initial digital campaign

A digital campaign on EPI with the hashtag #VaccinesWork was conducted from 29 September to 21 October 2020. Social listening tools – Keyhole and CrowdTangle – were used to assess its efficacy and gather insights on public perceptions around vaccination (see Figure 23). UNICEF staff were trained and given access to Facebook real-time tools to monitor and analyse content across social media. The campaign had an overall reach of 14.3 million people with a potential impact of 78.9 million impressions through engagement of partners and digital influencers.<sup>65</sup> Six million people were reached via EPI's official Facebook page in October 2020. The campaign was limited to digital platforms without additional boosting through mass media or field-level activities.

Figure 23. Facebook insights on the digital campaign



Insights from the campaign revealed that older women talk more about vaccines. Most (80 per cent) of Facebook's adult population is under 35 years, highlighting the need to target younger women in vaccine-related conversations. Content about family issues, diseases and prevention, and vaccine-related information, resonated more with females than with males, who focused primarily on social and political issues surrounding immunization campaigns. It was found that colourful public service messages, field images and stories, memes/humour and interactive and engaging posts are popular.<sup>66</sup>

The objectives of the campaign were to:67

- Increase **awareness** about EPI's routine immunization services and guidelines, especially in the context of COVID-19, on digital media platforms;
- Drive **acceptance** for routine immunization during COVID-19 through advocacy, social conversation, and persuasive content;
- Generate leads, develop interest, drive social mobilization of message, and ignite **engagement** for EPI's initiatives for routine immunization during COVID-19 through interactive and user-friendly content.

<sup>&</sup>lt;sup>65</sup> Reach is the unique number of people who saw a post at least once. Impressions are the number of times a post was seen. https://help.crowdtangle.com/en/articles/1184978-crowdtangle-glossary

<sup>66</sup> UNICEF. (n.d.). Strategically augmenting female participation in vaccine-related conversation in Pakistan, UNICEF Pakistan.

<sup>&</sup>lt;sup>67</sup> UNICEF. (2020). EPI Digital Campaign Report. UNICEF and EPI Government of Pakistan.

## **Brand Lift Study (BLS)**

Following the initial digital campaign, a Brand Lift Study (BLS) was conducted by Facebook from 5 October to 2 November 2020 to test and identify the most effective content to engage target groups. The lift questions were shared with control and test groups. Overall, females demonstrated higher ad recall than males regarding visiting health facilities for vaccinations and the safety of facilities.

The BLS results showed that:

- **Illustrative images performed highest,** both for recall and shifting health behaviours and perceptions. This content type included quizzes, polls, illustrations and youth engagement content.
- Images featuring relatable people (field images) were memorable, especially for women.
   Females exhibited greater ad recall than males for images showing immunization activities in the field where images of familiar people, e.g., mothers, fathers, and children, were used.
   The description should be informative and the image high quality, attractive and eye-catching to increase recall.
- Videos did not perform as well as other formats and require a deeper look to identify which formats are more effective. Videos need to be included to have a mix of content on digital platforms to avoid monotony for the target audience.

## Tailored gender-responsive social media assets

The findings from the BLS were used to tailor content for a younger audience with information about VPDs through illustrative message cards. Cards with attractive images from the field along with a caption encouraging vaccinations were also shared and were more popular among females.<sup>68</sup>



#### **Figure 24.** Messages developed to counter anti-vaccine narratives on Facebook

<sup>68</sup> UNICEF. (n.d). Strategically augmenting female participation in vaccine-related conversation in Pakistan. UNICEF Pakistan.

A team of social media bloggers was engaged, comprising young mothers and female influencers who had a high female following. They amplified vaccine-related content through their personal digital platforms/handles and helped reduce vaccine hesitancy. It was observed by Facebook that messaging strategies used by UNICEF in earlier campaigns to divert negative sentiment into positive were extremely effective and must be continued. The social media team therefore joined private groups related to mothers, pregnancy, vaccinations, infants/toddlers, and popular female forums to monitor the conversations for any emerging negativity and encouraged mothers/caregivers to support immunization by sharing facts and personal anecdotes.<sup>69</sup>



Figure 25. Photo message cards promoting routine immunization during COVID-19

One of the limitations of Meta's social media outreach and insights is that they cannot give access to conversations within private or closed groups. However, Meta was able to identify and share the locations of closed groups that had a high index of vaccine-related conversations. Many were female groups such as young mothers and mothers-to-be, and parents/caregivers. The social media bloggers and influencers were asked to join different groups in order to facilitate vaccine-related conversations and share accurate information when a rumour was spreading. They were also equipped with responses to FAQs and key messages in case incorrect information was circulated. This strategy not only helped in manual social listening within closed groups, but also addressed queries and public concerns, especially from a gender point of view, that would otherwise be ignored if only automated social listening was used.



#### Figure 26. Instagram posts by female bloggers promoting routine immunization

\* Need a hires image / link to the post

## Video testimonials

Based on the insights of the digital campaign and the BLS, video testimonials were developed for COVID-19 featuring female doctors, educators, youth, politicians and celebrities, and shared through the Ministry of Health social media platforms. A female Parliamentary Secretary for the Ministry of National Health Services stressed the benefits of taking the vaccine and that fighting COVID-19 was a national responsibility. Other videos highlighted the simple registration process, the importance of completing routine immunization for infants and vaccinating parents and elders, and discussed the mild side effects. Videos also showed the vaccination centres with female vaccinators.

## **MR Campaign**

The exclusive hashtag #YesToMRvaccine for the recent MR campaign reached out to over 24 million unique users with 176 million impressions (number of times users have seen posts containing hashtag). The hashtag also trended in Pakistan on day one of the campaign. An overall sentiment score (which measures the attitudes and opinions towards social media feeds) was overwhelmingly positive with only 3 per cent negative sentiment and 47 per cent positive sentiment. According to Facebook's CrowdTangle Social Listening Dashboard, many posts for #YesToMRvaccine and #MRcampaign were identified as Overperforming, Hot and High interaction posts.

## Multi-media campaign for World Immunization Week (WIW) 2022

Data insights were used to inform a multi-media campaign (radio, television, print, outdoor and digital media) for World Immunization Week (WIW) 2022. Concerted media buzz was supported by awareness-raising events in schools and mosques, community engagement sessions, and deployment and mobilization of lady health workers (LHWs). Tweets on vaccine safety for pregnant and lactating mothers and social media videos featuring female gynaecologists were also promoted and disseminated.

## **Budget**

The digital engagement component used funding by Meta, GAVI, UNICEF and USAID. The COVID-19 video testimonials were funded by UNICEF with a total budget of \$20,000. The Brand Lift Studies were funded by Meta. The ongoing EPI campaign budget was \$60,000 and was funded through the annual GAVI fund. The COVID-19 campaign was partially funded by USAID (\$30,000) and through Meta (\$229,700). The MR campaign was funded by GAVI (\$40,000) and the WIW campaign by GAVI (\$15,000) and Meta (\$48,000).

## Timeline



# **Achievements**

The insights-based digital vaccination campaign reached nearly 7.2 million people. To measure the effectiveness of the content, a post-campaign survey was conducted comparing users exposed to the ads (test) and those who were not exposed (control) to understand the likelihood of caregivers vaccinating their children. The results suggested that as a result of exposure to the campaign some users were inclined to vaccinate their child at a health centre or felt that it was safe to vaccinate during the COVID-19 pandemic. These results were statistically significant at the 99 per cent confidence level.

Insights provided better understanding of the barriers to vaccine adoption and perceptions of vaccine messages, enabling the development of evidence-based campaign material. Content on the Government of Pakistan's Facebook page was analysed to amplify the reach and effectiveness of the campaign and specifically address barriers to women's uptake of services.

Regarding different types of content (see **Table 9**), illustrative images were the most effective in terms of people remembering seeing an ad from Facebook (+2.5 percentage point increase between those who saw the ad versus those who did not), reporting that they were likely to have their child vaccinated at a local health centre (+2.7 percentage point increase) and in believing that visiting a health centre during COVID-19 is safe (+2.0 percentage point increase).<sup>70</sup>

Test	Illustrative images	Field images	Videos
Ad Recall	+2.5*	+2.1*	No Statistically Significant Lift
Likelihood of Vaccinating at Local Health Centre	+2.7*	No Statistically Significant Lift	No Statistically Significant Lift
Continued vaccination during the COVID-19 pandemic	No Statistically Significant Lift	No Statistically Significant Lift	No Statistically Significant Lift
Perceived safety of visiting health centre	+2.0*	No Statistically Significant Lift	No Statistically Significant Lift

### Table 9. Campaign results highlighting where exposure to the ads caused a lift (test vs control)

Source: UNICEF Pakistan

\*Statistically significant at the 99% confidence level

<sup>&</sup>lt;sup>70</sup> UNICEF. (2020). Amplifying immunization efforts during the COVID19 pandemic: UNICEF Pakistan Insights for Impact Project with Facebook. UNCEF Pakistan.

The insights-based strategy was gender-responsive and resulted in increased conversation among women about vaccines. During the campaign the total outreach was 14.3 million, out of which 61 per cent were females, and the total potential impact (# of times messages were shown) was 78.9 million. Ad boosting was tailored to increase visibility to young females, resulting in 32 per cent of 7.2 million Facebook reach attributed to women between 18 and 34 years (see **Figure 27**). Messages addressing concerns related to vaccine safety during pregnancy and lactation were designed and disseminated based on analysis of public narratives on social media. Female caregivers' hesitancy over the safety of visiting health facilities during the pandemic was also countered.



Figure 27. Campaign reach disaggregated by gender and age

## Figure 28. Female health worker visiting her area on a scooter





An increase in engagement and participation of women was observed during the community engagement activities conducted in the 46 targeted health system strengthening districts, focusing on areas with high numbers of zero-dose and missed children. Mothers, mothers-in-law and grandmothers were engaged to promote decision-making among women and uptake of vaccines. Based on reports of CSOs, zero-dose coverage improved in these UCs and from a total of 16,412 zero or missed dose children identified, 11,048 received vaccines following community engagement efforts.

The campaign promoted new gender norms by featuring stories of female vaccine heroes such as social mobilizers and LHWs who were taking on non-stereotypical work. Female EPI team members were publicly acknowledged and recognized.

Take the case of Mahgul Noor, District Health Coordinator of Lasbela, Balochistan, a large district with 30 UCs. Mahgul is a 29-year-old single woman who lives alone, miles away from her family, and leads a 40-member male EPI team. Lasbela is a large district and Noor was responsible for training teams, preparing and managing campaigns. Mahgul is from Kalat District, an area marred by security issues, restrictions on movement for women and limited educational opportunities. Mahgul relates that

"I had to travel a lot in difficult areas like Washuk and Chaghi for many days at a stretch but there is something irresistible about saving lives and having a positive impact in the lives of others. Once I went to visit a local tribe and when we called all women with children to attend our session on vaccinations, a woman sitting inside a gloomy old room just stared at me with a steely gaze... She told me that she gave birth to three babies and all of them died of tetanus... I told her about the Tetanus vaccination and that it would save the lives of her future children. Her expression changed and her eyes had a spark of disbelief but hope as well. She started crying and thanked me for this information that could change her life. That is the expression I want to remember forever! Because that is what motivates me to step out of the comfort of my home and work for my community every single day, regardless of the difficulties that I have to face."<sup>71</sup>



## Figure 29. Mahgul Noor, District Health Coordinator, Lasbela, Balochistan

<sup>&</sup>lt;sup>71</sup> Expanded Programme on Immunization Pakistan: Success Stories.

# Lessons learned and recommendations

Health services including immunization were impacted by the COVID-19 outbreak as people fearing infection avoided visiting health facilities. The digital media campaign served to restore confidence and trust among caregivers to complete routine immunization visits. Facebook provided key insights about the public's information requirements during the pandemic and enabled tailored messages and content to reach target groups. The partnership with Meta ensured access to real-time data and use of digital technology to engage with the public when face-to-face interactions were limited.<sup>72</sup> The gender focus allowed for female engagement and online conversations in a context where women have limited mobility, which was further hampered by the pandemic. The digital campaign complemented ongoing community engagement efforts such as awareness-raising sessions, door-to-door visits and engagement of religious leaders and elders.

A combination of digital and on-the-ground community engagement activities targeting female caregivers and community influencers is required to address deep-seated gender barriers and promote new social norms and a sense of responsibility to protect children against diseases. Areas with lower digital penetration were targeted with more intensive community engagement. Online and offline social listening provided key insights to adapt demand and service delivery approaches. The social profiling pointed to the importance of engaging fathers and grandparents and key health-related decision-makers. Likewise, the engagement of health-care providers and religious influencers was critical for promoting positive behaviours and was reinforced through both digital and community-level platforms.

Expanding the female health workforce can be an important pathway to reaching a larger number of women and girls while also challenging gender norms and creating new norms around roles and professions that are considered acceptable for women. In conservative areas recruiting siblings to team up as vaccinators can address challenges faced by female vaccinators who have to travel long distances alone. Hiring male social mobilizers will aid outreach efforts with men and elders. Being engaged as health workers or social mobilizers can increase women's self-esteem and sense of agency. Community acceptance of female health workers can in turn foster new norms and improved aspirations for future generations of women and girls.

Female vaccinators, health workers, social mobilizers and community resource persons were engaged in selected UCs of targeted districts with high numbers of zero-dose children and low EPI coverage to reach out to female caregivers, in areas where interactions with male vaccinators and mobilizers were not accepted. The female workforce was able to reach mothers, mothers-in-law and grandmothers through door-to-door visits and community engagement sessions. Female caregivers who had either fully vaccinated their children or were following the EPI schedule encouraged mothers to vaccinate their children. An increase in coverage for zero-dose and defaulter children was recorded. Pre- and post-vaccination counselling was important in preventing vaccine drop-out. Social listening highlighted that often vaccinators do not engage in meaningful interaction with the caregivers and did not provide adequate pre- and post-vaccination information.

<sup>&</sup>lt;sup>22</sup> UNICEF. (2020). Amplifying immunization efforts during the COVID19 pandemic: UNICEF Pakistan Insights for Impact Project with Facebook. UNCEF Pakistan.

This intervention also highlights the importance of harmonizing demand generation with high-quality and gender-responsive service delivery. During this period, efforts were made to improve service delivery through a pilot of the 24/7 birth dose initiative to immunize newborns, and inclusion of vaccines as part of an integrated essential services package in polio high-risk UCs. Additionally, female vaccinators were recruited in three out of Pakistan's four provinces – Khyber Pakhtunkhwa, Sindh and Balochistan – to address women's hesitancy to be vaccinated by men.

Considerable gender barriers to access and uptake of vaccines persist in Pakistan. Given the multiple and intersectional determinants of immunization coverage, strategies should tie together both gender and pro-equity focused approaches. This case study highlights the importance of a cohesive demand generation and gender responsive service delivery strategy. A combination of traditional and digital media and community engagement were used to improve vaccine coverage. Online and offline social listening proved to be a critical component in improving services and designing targeted and gender-responsive communication interventions. Improving vaccine uptake requires understanding the needs of women, girls, men and boys and allowing for timely adaptions and gender-responsive services and demand promotion. Social listening allowed for rapid adjustments leading to people-centred and responsive programming.



Valuable contributions and support for this case study were provided by Zara Jamil, Waqas Shafi, and Muqaddisa Mehreen. This case study draws on secondary data review of available documents and interviews with the UNICEF Pakistan SBC team.



# **Case study 4**

# Entertainment-education to address gender norms around early childhood development and immunization in Rwanda

"When we launched the early childhood development (ECD) programme back in 2012, most parents said that looking after children was for women. When they listened to the Itetero programme, they could compare themselves with other families where members supported one other in keeping up with the vaccination of their children. Several men are now bringing their children to the ECD centre and come back to pick them up at the end of the day... I can affirm that now many men are aware of their roles in ensuring the welfare of their children, including their vaccination. I too can be an example. I am no longer ashamed of taking my children to the vaccination centres."

Evariste Ndengejeho, ECD and Itetero listening club coordinator, Diocese Shyira

## **Background and context**

Compared to most African countries, Rwanda has high immunization coverage. The EPI was initiated in 1980 and coverage for children has been growing steadily. The Demographic and Health Survey (DHS) shows that in 2019/20, 96 per cent had received all basic vaccinations and 84 per cent all age-appropriate vaccinations (see **Figure 30**).<sup>73</sup> DHS data show minimal variations in coverage based on background characteristics. Urban children are slightly more likely to receive all basic vaccinations than rural children (97 per cent versus 95 per cent). Children from households in the highest and fourth wealth quintiles are slightly more likely to receive all basic vaccination coverage is highest in the capital Kigali City and in the South (97 per cent each) and lowest in the north (94 per cent).

<sup>&</sup>lt;sup>73</sup> NISR (National Institute of Statistics of Rwanda), Ministry of Health (MOH), and ICF International. (2020). Rwanda Demographic and Health Survey 2019-20. Rockville, Maryland, USA: NISR, MOH, and ICF International.



#### Figure 30. Childhood vaccination in Rwanda

Percentage of children age 12-23 months vaccinated at any time before the survey

Sources: DHS 2019-20

Key factors contributing to Rwanda's success in immunization coverage are a strong political will to provide universal health services, decentralization of EPI implementation to the district and village levels, and outreach by community health workers who combine awareness-raising with surveillance.<sup>74</sup> Another factor distinctive to Rwanda is the practice of *imihigo*, where national and local government leaders sign performance contracts to achieve certain targets and promote both accountability and ownership. It is important to note that Rwandan people have a high trust in the public health system.<sup>75</sup>

In most countries, mothers' level of education is a predictor of immunization coverage with a positive correlation between increased education and vaccination uptake.<sup>76</sup> However, in Rwanda, low maternal education is no longer a significant determinant of non-vaccination in children. In fact, in 2019, the proportion of zero-dose children was reported highest among the children of highly educated mothers (1.9 per cent) and among the children of the richest wealth quintile (0.8 per cent) compared to other education and wealth categories.<sup>77</sup>

Longitudinal data show no significant disparity in immunization coverage between girls and boys (see **Figure 31**). However, the most recent data show that coverage was slightly higher among female children compared to males. Differences were noted in both basic and age-appropriate vaccinations and for certain antigens; for example, the first polio dose at birth was lower among boys (93 per cent) than girls (95 per cent). Based on national-level data, girls are no longer negatively impacted by gender-based vaccine inequities. Further analysis is needed to understand why boys have lower vaccination rates and if there are regional differences.<sup>78</sup>

<sup>&</sup>lt;sup>74</sup> Bao, J., McAlister, H., & Robson, J. et al. (2018). Near universal childhood vaccination rates in Rwanda: How was this achieved and can it be duplicated? *The Lancet* March 15, 2018.

<sup>&</sup>lt;sup>75</sup> Ibid.

<sup>&</sup>lt;sup>76</sup> Forshaw, J., Gerver, S.M., Gill, M. et al. (2017). The global effect of maternal education on complete childhood vaccination: a systematic review and meta-analysis. *BMC Infectious Diseases* 17, 801.

<sup>&</sup>lt;sup>77</sup> NISR (National Institute of Statistics of Rwanda), Ministry of Health (MOH), and ICF International. (2020). Rwanda Demographic and Health Survey 2019-20. Rockville, Maryland, USA: NISR, MOH, and ICF International.

<sup>&</sup>lt;sup>78</sup> UNICEF. (2021). Immunization Coverage and Equity Assessment in Rwanda: Final Report. UNICEF and Ministry of Health Republic of Rwanda.



### Figure 31. Vaccine coverage rates for girls and boys

Sources: Immunization Coverage and Equity Assessment, 2021

# **Gender barriers**

Gender-related barriers impact access to vaccinations in several ways. According to a recent Knowledge, Attitude, Practices and Behaviours (KAPB) study, immunization and childcare are the responsibility of the woman. The same study found that women are more knowledgeable than men about immunization.<sup>79</sup> Women know the vaccine schedule and are able to identify the ages at which their children received different vaccines. Men were also able to identify the vaccination period as running from birth to 15 months but could not identify the exact ages at which vaccines were scheduled. A male participant in the study from Rutsiro explained that men may not know the vaccine schedule but encouraged their wives to listen to the advice of health workers. He emphasized gender roles, stating that men were responsible for feeding the family while women looked after the children.<sup>80</sup>

Interviews for this case study with service providers, community mobilizers and caregivers confirmed gender roles around childcare. Jean-Paul Ahishakiye, a mobilizer and community theatre actor in Rwamagana district, stated: "In most cases, the men rarely take their children to be vaccinated. Especially in the rural areas, the social and parenting roles of the children are largely dealt with by women. When a woman fails to get time to take a child for vaccination her man never comes in to take the child to be vaccinated." He stressed that "women are always the leading champions of vaccination, they are always eager to be informed and ensure that their children never miss any vaccine".

Although children's healthcare is primarily the domain of mothers, they often face restrictions on mobility, decision-making, income-generating activities and interactions outside the home, which prevent them from seeking health services.<sup>81</sup> For instance, only three out of 10 women report making independent decisions about their health including the decision to take children for vaccination. Most women (68 per cent) reported making joint household decisions with their husbands regarding healthcare, household purchases and visits to their family or relatives.<sup>82</sup>

<sup>&</sup>lt;sup>79</sup> UNICEF. (2021). Knowledge, Attitudes, Practices and Behaviours on Immunization in Rwanda. UNICEF, Rwanda Ministry of Health and Rwanda Biomedical Centre.

<sup>&</sup>lt;sup>80</sup> Ibid.

<sup>&</sup>lt;sup>81</sup> UNICEF. (2021). Immunization Coverage and Equity Assessment in Rwanda: Final Report. UNICEF and Ministry of Health Republic of Rwanda.

<sup>&</sup>lt;sup>82</sup> NISR (National Institute of Statistics of Rwanda), Ministry of Health (MOH), and ICF International. (2020). Rwanda Demographic and Health Survey 2019-20. Rockville, Maryland, USA: NISR, MOH, and ICF International.

The KAPB study highlighted that distance to facilities is a key barrier to accessing immunization services. Travel can take up to 30–45 minutes and the cost of transportation is high. Waiting times are long. Children living without disabilities are more than four times as likely to follow vaccine schedules than children living with a disability.<sup>83</sup> These barriers are heightened for women living in remote areas and from poorer households.<sup>84</sup>

Interviewees revealed that women who had many children to look after or were busy working on their farms found it difficult to keep up with vaccination schedules. Stigma associated with teen pregnancy within families, communities and service providers posed challenges in accessing antenatal services. Teen mothers may also try to hide their pregnancies and miss vaccines or antenatal visits. According to the DHS, 98 per cent of births are at health facilities, making it easy for teen mothers to have their children immunized at birth and learn about the importance of routine immunization. Interviewees mentioned that certain religious groups were also resistant to vaccines. A community-level coordinator said it was difficult to convince people with strong religious beliefs to have their children vaccinated when they refused to accept even the free porridge offered at ECD centres.

Despite low male involvement in vaccination, men attached an economic benefit to it because it saved family resources that would be spent in the treatment of preventable diseases.<sup>85</sup> When men brought children for vaccinations, health-care workers often served them first as an incentive to encourage fathers to bring their children for immunizations.<sup>86</sup> Interviewees highlighted that men are often ridiculed by both men and women when they take their children for vaccinations and are asked what happened to their wives. Interestingly, it is considered acceptable, even heroic, for a man to take the child to hospital for a serious illness such as malaria but routine check-ups or immunization visits are not seen as a man's responsibility. When side effects are experienced and the child gets fever or some other problem, it is seen as the women's responsibility and she will need to stay home and look after the child, resulting in a loss of income for the day.

# **The intervention – Integrated entertainment-education**

UNICEF Rwanda has been promoting an integrated entertainment-education approach to address positive parenting and gender socialization covering children's health, education, protection, hygiene, and sanitation. This approach combines radio and television broadcasts, community theatre, community engagement and digital engagement through social media. Immunization and father's engagement in children's health and rearing are among the health practices promoted. There are two main multimedia platforms – *Urunana* and *Itetero*.

Since 2014, UNICEF Rwanda has partnered with *Urunana* Development Communication, an NGO well known for its radio drama series *Urunana* (Walking together or hand in hand). The series was conceived in the aftermath of the 1994 genocide as a means to foster resilience and community building. *Urunana* aims to entertain and educate listeners on a range of public health and social issues that impact the well-being of families and communities. The target audience are rural women, men and youth, and the issues covered include maternal and child health, gender-based violence, child protection, education and literacy, hygiene and sanitation and social protection. The communication assets include the flagship radio series, the Umuhoza radio magazine, community theatre and outreach, and a television component.

<sup>&</sup>lt;sup>83</sup> UNICEF. (2021). Knowledge, Attitudes, Practices and Behaviours on Immunization in Rwanda. UNICEF, Rwanda Ministry of Health and Rwanda Biomedical Centre.

UNICEF. (2021). Immunization Coverage and Equity Assessment in Rwanda: Final Report. UNICEF and Ministry of Health Republic of Rwanda.
 Ibid.

<sup>&</sup>lt;sup>86</sup> UNICEF, (2021). Knowledge, Attitudes, Practices and Behaviours on Immunization in Rwanda. UNICEF, Rwanda Ministry of Health and Rwanda Biomedical Centre.
In 2015, UNICEF Rwanda partnered with the Rwanda Broadcasting Agency (RBA) and Imbuto Foundation to create an entertainment-education radio series called *Itetero*, which means a nurturing space for children in the national language, Kinyarwanda. It was the first children's radio programme developed with children and for children. It was designed to educate them about Rwandan cultural values and stimulate their cognitive, socio-emotional and physical development. The radio programme was complemented by the *Itetero*TV show that aired on Rwanda Television (RTV) and the *Itetero*TV YouTube channel in 2018. The past few years have seen increasing presence on social media through Facebook, WhatsApp, Instagram and Twitter.



#### Figure 32. Itetero live recording at Rwanda Broadcasting Agency

The goal of *Itetero* is to promote positive gender norms around parenting and early socialization. Specifically, the programme aims to promote key behaviours related to ECD, addressing health, nutrition, sanitation and hygiene, child protection, education, and birth registration. Through songs, stories, narrations, dramas, books and poems, the programme promotes positive parenting, including increasing the father's participation in the growth and development of a child and the mother's participation in family decision-making. The radio and TV programme includes targeted segments for children (3–6 years old) and caregivers of children aged between 0 and 6 years.

In addition to these two long-running programmes, UNICEF Rwanda's SBC Strategy for Routine Immunization (2021–2026), to be implemented with the Ministry of Health and Rwanda Health Communication Centre, articulates expected gender-related changes in its communication objectives. The entertainment-education media assets (on radio, television and social media) are part of the SBC approaches and closely linked with the community engagement component of the strategy. Specifically, the strategy aims to:

- Increase positive attitudes of spouses/co-parents towards immunization;
- Increase the number of fathers of children 0–5 years who take their children for immunization or support their wives to do so;
- Change attitudes among fathers, families, and the community that immunization is the mother's responsibility;
- Increase self-efficacy and decision-making among female caregivers of children 0–5 years to enable them to immunize their children;
- Increase the social expectation among community members to immunize their children;
- Establish a new social norm where all parents are expected to immunize their children, including those with disabilities.

*Itetero* uses a two-pronged approach to shift gender norms, addressing parents while also starting early with children. Messages address gender norms within households and sharing responsibilities and emphasize the responsibility of men to know about their children's health including immunization. *Itetero* content focuses on the first decade of life which is a foundational phase to address gender socialization. The segment for children uses animal characters and the segment for parents is a family drama with human characters.

## Figure 33. Itetero programme for children



In the children's series, each animal character represents certain traits that are typically associated with being masculine or feminine. For instance, the lion is seen as a strong character, bold and powerful. The little calf is seen as small, humble, and respected in Rwandan culture. Boys and girls are encouraged to play different and non-stereotypical games. In one episode, the boys are playing football and a girl wants to join. She is told girls don't play football and by the end of the episode more girls have joined her and they are playing better than the boys. In another episode focusing on playing with things that are easily available in homes, a girl invites her friends to play with her and learn how to make an airplane out of wood and paper. She initially faces some resistance but the episode ends with everyone agreeing that no matter what sex you are, children can make and play with airplanes.

In another episode, a girl character with a visual impairment joins other *Itetero* characters in the safe space for play. When Gatama proposes two new games, some characters say they do not want to listen to her suggestions, because they are coming from the girl who also has a disability, and she could not have any valuable ideas. The lion named Ntare joins in and says that both girls and boys, with and without disabilities, have valuable ideas and have the right to propose their initiatives to make the play more inclusive and engaging. After a bit of a discussion, the resisting characters accept the idea and join the games. The content aims to break gender biases around objects that girls and boys typically play with. Each episode ends with a song which conveys a key message on gender equality and empowerment. The children's series also includes a literacy and numeracy component.

*Itetero* includes a live component with experts who explain scientific facts and a call-in programme where parents can get answers to questions or provide feedback. *Itetero* has an annual community road show where children and parents interact with the characters. Parents and children are part of the story development workshops with the creative team and national partners. Often the stories are based on real-life incidents such as the case of the mother who was worried to leave her children for the day because she feared her husband would not feed them lunch. Improved situations are portrayed where parents work together, fathers begin to help, and mothers are no longer worried about their children not being fed.



#### Figure 34. Local actors performing in their community

*Urunana* uses radio drama, live community theatre performances by popular actors and community outreach through home visits. As in *Itetero*, a broad range of topics in health, nutrition, protection and positive parenting are covered, including immunization, both for pregnant women and infants aged 0–15 months. Messages stress the responsibility of men in accompanying women for vaccine visits and ensuring the vaccine schedule is followed. The programmes focus on hard-to-reach areas and vulnerable families.

Mass media, combined with interactive media tools such as interactive voice response (IVR), Internet of Good Things (IoGT), WhatsApp trees, and SMS enable rapid and regular evidence generation and feedback.



Figure 35. Listening to the *ltetero* radio programme at a ECD centre

Media efforts are reinforced by interpersonal communication. Community health workers (CHWs) promote the benefits of vaccination, remind families about the number of vaccines and doses needed for a child, and provide information on when and where to go for vaccination. They also discuss the benefits of breastfeeding, hygiene, ANC services, growth monitoring, family planning services, health insurance, and preventing malaria and COVID-19. CHWs share vaccination information with caregivers when they visit the health facility.

During feedback collection and assessments to inform content development, experts and mobilizers actively engage boys and men to question and recognize issues of masculinity that are harmful and perpetuate power over girls. This helps to ensure male engagement and encourages them to become allies for gender equality. Considerable effort is made to ensure that girls are empowered with information, skills and agency to make their own choices. They are viewed as active participants in the *Itetero* programme as contributors to the episodes, as actors, narrators, and even TV/radio hosts for some segments or major events. This not only mentors them but also builds their sense of personal worth and teaches them to interact with others constructively.



#### Figure 36. Children interacting with the production team

## Scope and coverage

Rwanda's population is estimated to be around 13 million.<sup>87</sup> Radio Rwanda and its community radio network cover 98 per cent of the country.<sup>88</sup> Radio is the most frequently accessed medium in Rwanda with 61 per cent of men and 81 per cent of women listening to radio on a weekly basis. Television viewership is 20 per cent for women and 30 per cent for men.<sup>89</sup>

The regular listenership of the *Urunana* radio drama is estimated at around six million. Since 2014, over 100,000 people (52 per cent female and 48 per cent male) attended the community theatre performances. Over 120 community theatre actors have been trained and engaged. The *Urunana* programme has reached nine million people and produced over 2352 episodes since inception.

The reach of *Itetero* is also estimated at six million, including children aged 3–6 years. The YouTube channel has approximately five million subscribers. *Itetero* attracts viewers not only in the country but also in the diaspora, where it is used to teach children the Kinyarwanda language and Rwandan culture. Programmes are broadcast on Radio Rwanda, BBC Rwanda, Radio 10, and community and private radio channels. The strategic use of radio allows for a wide reach among children, youth, women, men, religious leaders and policymakers.

<sup>&</sup>lt;sup>87</sup> National Institute of Statistics of Rwanda. (2022).

<sup>&</sup>lt;sup>88</sup> Rwanda Utilities Regulatory Authority Report. (2020).

<sup>&</sup>lt;sup>89</sup> National Institute of Statistics of Rwanda. (2022).

## Budget

The average per annum investment is estimated at around \$85,000 for Urunana. The annual budget of \$180,000 covers production, co-creation of content, community outreach, TV production, and cartoons for Itetero. Funding is provided by UNICEF and RBA provides free airtime.

## Timeline



## **Achievements**

Gender transformation is a central theme in both *Itetero* and *Urunana*. Participants are urged to critically examine why they are the way they are and how that can change. Initially, stand-alone episodes on gender were included to raise awareness of the barriers girls face during early childhood in accessing education, health, protection and other services. Currently, addressing gender norms is integrated in all the episodes. Content development workshops include refresher trainings on gender socialization, gender stereotypes and norms.

In an interview for the case study, Beatrice Nyorangore, a mother and an Itetero listener from Musanze District, said that when she had her firstborn, she did not understand the importance of vaccines. She was struggling in life and prioritized making ends meet. Her child did not complete the vaccination schedule and ended up getting very sick and needing to be hospitalized. After listening to the programme, she made sure her younger children were all vaccinated. "Today, I am thankful to the Itetero programme," she said. "In the past I spent all my time trying to earn money, but I spent all money on the treatment of my child. We have changed our behaviour, now we have children with good health because they received all vaccines. Now we can sing for our children, we talk to him. Look at this one I hold in my hands; he received all vaccines."

A qualitative assessment was conducted in 2018 to gain an understanding of the effectiveness of *Itetero* radio programme in three rural communities, Nyamasheke District (Cyato Sector), Gicumbi District (Miyove Sector), and Ruhango District (Ntongwe Sector).<sup>90</sup> Findings reflect shifts in gender norms among both caregivers and children.

<sup>90</sup> Search for Common Ground. (2018). Itetero Early Childhood Development Radio Program Assessment: Audience Feedback Component.

For instance, before the broadcast children believed that most activities could only be done with their mother. After listening, children encouraged both their parents to play with them, started asking to be carried around and accompanied to school and adopted a more open attitude towards sharing problems with them. Fathers who used to consider their responsibilities as limited to financially providing for the family's needs started playing with their children, taking them to the hospital and/or for vaccinations; some of them even started to support their wives in other household duties.

*"Itetero* is like a class for me," said a mother from Bugesera District. "It has helped me to positively change my ways of managing my home. ... Whenever I left home without cooking, like the Ugali instance (in the programme), my husband would not cook for the children, but after listening to the *Itetero* programme we have come to learn the vital contribution of a man in the children's upbringing." These findings indicate that *Itetero* has contributed to a shift in gender roles among parents while also changing beliefs and attitudes among young children. While we do not have evidence to attribute immunization uptake to the programme, these testimonies suggest shifts in gender norms in all areas of parenting, including health and immunization.

An audience surveillance study for *Urunana* showed that listeners had a clear understanding of the key practices caregivers must ensure during the first 1,000 days.<sup>91</sup> They highlighted that the start of the child's journey of life was critical for their growth and required the mother to take care of her health from conception with the active support of the father. Listeners were able to explain that early childhood development required providing good nutrition for the mother and the baby, stimulating the baby's brain by singing and reading books and looking after the health of the baby by completing the required immunizations. The study also showed resistance by fathers to engage in childcare. Men saw their responsibility as limited to providing food and health insurance for the family. Positive changes were noted among younger men, as one listener explained: "Men who support their wives are those who are still young. They can even go to the kitchen and cook but old men cannot do it. They go instead to the [village] centre and wives and children stay behind doing home chores. For them, what is important is that they have brought food for them."

Field assessments and feedback from community members show that both *Itetero* and *Urunana* have contributed to positive changes in gender norms, attitudes, practices and behaviours in several aspects of early childhood development, including immunization. The intervention has created opportunities for individuals to actively challenge gender norms and address power inequalities in families and communities. This has the potential to impact decision-making about health service seeking. A comprehensive assessment of the impact of the SBC interventions including *Itetero* and *Urunana* on gender-related social norms and specific health and well-being practices is planned for 2023.

## **Lessons learned and recommendations**

Including immunization as part of a broader child health and development package has benefits such as regular monitoring and early detection of diseases. Evariste Ntacyombahishe, an ECD Coordinator from Nyarugenge District, explained that the centre offers services across five areas – education, health, hygiene, nutrition, and child protection. CHWs make monthly home visits to monitor children's health and growth and remind parents about the routine vaccination schedule. Evariste gave an example of a case where a child began to show symptoms of measles and further investigation showed that the child had missed two measles-rubella vaccines. In this case the ECD services and information and demand generation worked in tandem.

<sup>&</sup>lt;sup>91</sup> Urunana Development Communication. (2020). Audience surveillance report.

#### Case study 4

The next phase, *Itetero* Plus, will expand the focus to include adolescent issues such as school-towork transition and life skills and use innovative technologies to reach youth. HPV-related messages will also be included. Currently, the UNICEF team is working on a series of audio-visual assets called "Gamechangers" (working title) where two stories will feature two fathers who participate equally in childcare, including following the immunization schedule, and where mothers play an equal role in household decision-making.

The key challenges for sustainability and government ownership are funding and ensuring quality media production that builds on participant feedback. Animated videos, in particular, are expensive to produce. This has led to partnerships with organizations such as Sesame Street or Ubongo Kids to adapt regional child-friendly content and negotiating with national providers such as RBC to provide free airtime.

Building and sustaining the capacity of partners to produce quality media products is challenging because of high staff turnover among media partners. Another gap is in the capacity to produce child-friendly media content; although many radio stations produce content for children, most is not child-centred. Also lacking is a systematic process to incorporate feedback in programme design and content creation. A mechanism is needed to compile and categorize the feedback – be it complaints, praise, recommendations or suggestions for thematic areas.

The experience from this intervention confirms that social and behaviour change aimed at gender transformation requires sustained engagement and reinforcement and the integration of different media platforms and interpersonal communication. Furthermore, partnerships between media, the health system, community members and local-level service providers and mobilizers deliver a cohesive 360 degrees response and a single narrative for the desired change around gender norms.

#### Figure 37. Community theatre performance





Valuable contributions and support for this case study were provided by Maksim Fazlitdinov, Redempter Batete and Jean Claude Rukundo from the SBC team in UNICEF Rwanda. This case study draws on review of available documents and primary data collected through interviews with UNICEF Rwanda SBC team, service providers, mobilizers and caregivers in Nyarugenge, Musanze, Bugesera, Rwamagana, Nyamasheke and Karongi Districts.



## **Case study 5**

# Social listening for COVID-19 vaccine equity in Sudan

"A woman is half of the society, in fact women are the whole society. Empowered women can vaccinate their children and this reduces their chances of developing disease so that they can become healthy and disease free. A woman of this kind is well aware and can overcome all challenges."

Female vaccinator Insaf Muhamadain from North Darfur

## **Background and context**

Childhood immunization data in Sudan show that 81 per cent of infants have received three doses of pentavalent vaccine protecting them from diphtheria, pertussis, tetanus, pneumonia and hepatitis B, and 80 per cent have received at least one dose of the measles vaccine.<sup>92</sup> Several factors contribute to health disparities, including location (between states and urban/rural), education, income levels, and health centre staffing, facilities and budgets. Gender inequalities resulting from structural and social discrimination contribute to poor health, nutrition, education and livelihood opportunities for women and girls.<sup>93</sup> Only 70 per cent have access to a health facility within 30 minutes' travel from their home. Quality of care is poor, with only half of those who visit a health facility attended to by a skilled health worker.<sup>94</sup>

In Sudan, children's well-being and health, including vaccination, is primarily the responsibility of the mother.<sup>95</sup> Interviews conducted for this case study found that mothers turn to their older children and female relatives for support when they need help. Men typically do not help with child rearing or household work. Fathers are seen as the 'trusted' ones to safeguard the vaccine card along with other important family documents. However, fathers are not judged negatively by health workers or the community when they bring a child for vaccination; indeed, one vaccinator said that fathers are given priority because they are less adept at handling children for long hours or managing crying babies.

<sup>&</sup>lt;sup>92</sup> UNICEF. (2021). Health Annual Report. UNICEF Sudan.

<sup>&</sup>lt;sup>93</sup> WHO. (2021). Sudan Country Cooperation Strategy (2022-2025). WHO Regional Office for the Eastern Mediterranean.

<sup>94</sup> UNICEF. (2021). Health Annual Report. UNICEF Sudan.

<sup>95</sup> UNICEF. (2020). Polio Rapid Assessment. Federal Ministry of Health and UNICEF Sudan.

In rural areas the health centre is often distant and vaccines are available only on assigned days. Women living far away or with limited financial resources find it difficult to travel for routine immunization visits, and those with several young children do not want to leave some at home. Older women or mothers-in-law who have had several healthy children and have not received vaccinations during pregnancy do not always see the value of vaccines. Women may go to the centre because they are sick and are told to come back on another day for vaccines. In cities, women are usually able to come to the vaccination site alone, or accompanied by a male family member or an elderly female. In areas where there is conflict or a tribal population, there is mistrust of government aid of any kind.

Interviews highlighted that vaccine-related decisions are made by both partners or, in the case of a child, by the parents. In some communities, decisions on childhood immunization may be made by in-laws, typically the paternal grandmother. Sometimes a relative such as an uncle or aunt or an older sibling prompts the family to get vaccinated. For single women, parents or brothers may influence decisions.

A study of polio confirmed these findings. The study also showed that caregivers regarded youth, health promoters, midwives, religious and tribal leaders, and educated people as reliable sources of vaccine information. Women preferred to receive health messages at home rather than in public places or in groups. Most respondents believed vaccines were important and one of the main methods of preventing many childhood diseases.<sup>96</sup>

## **COVID-19 vaccination programme**

Sudan was the first country in the Middle East and North Africa (MENA) region to receive the COVID-19 vaccine through the COVAX initiative.<sup>97</sup> Vaccine rollout began on 9 March 2021, with health workers, the elderly and those with underlying conditions the first to receive vaccines. UNICEF and partners supported the rollout nationwide, including for refugees and migrants. Initially vaccination was offered at primary health centres in Khartoum State and then expanded gradually across all 18 states. By the end of 2021, 4.4 million doses of vaccines had been administered and 2.5 million doses were planned.<sup>98</sup> According to the Federal Ministry of Health (FMoH), as of June 2022, 10 per cent of the population was fully vaccinated.

Data from the first two rounds of the vaccine campaign show lower coverage among women (see **Table 10**). Women comprised less than 40 per cent of the vaccinated population (male coverage was over 60 per cent) and in some states the figure was as low as 12 per cent. Coverage data do not assess how differences in wealth, education, ethnicity, geographical location or age ntersect with gender, and there is a gap in understanding the determinants of lower coverage among women.

<sup>96</sup> Ibid

<sup>&</sup>lt;sup>97</sup> COVID-19 Vaccines Global Access, abbreviated as COVAX, is a worldwide initiative aimed at equitable access to COVID-19 vaccines directed by the GAVI vaccine alliance, the Coalition for Epidemic Preparedness Innovations, and the World Health Organization, alongside key delivery partner UNICEF.

<sup>98</sup> UNICEF. (2021). Health Annual Report. UNICEF Sudan.

A similar trend was observed on the Talkwalker platform, a social media management and analytical tool that provides real-time data tracking and in-depth social listening at scale where women had lower engagement on social media than men around COVID-19 and vaccination. For instance, the engagement of women on COVID-19 throughout the second COVID-19 vaccine drive was consistently low, below 35 per cent.<sup>99</sup>

#### Table 10. Vaccine coverage in Sudan

Vaccine Round	Female	Male	Total
<b>Round 1</b>	374,015	799,357	1,173,372
(9 March – 11 July 2021)	(31.9%)	(68.1%)	
<b>Round 2</b>	246,524	374,696	621,220
(29 August 2021 – 23 January 2022)	(39.7%)	(60.3 %)	
Total	620,539	1,174,053	1,794,592

Source: Federal Ministry of Health

## **Gender barriers**

Women and girls are impacted by barriers on both the supply and demand sides of vaccination efforts. Insights from social listening and feedback received by the field-based team highlighted that both women and men fear side effects, ranging from fever to infertility. In some instances, conspiracy theories such as claims that the Western world was trying to reduce fertility rates were also cited. There was also miscommunication over government criteria for vaccine eligibility. For example, pregnant women and lactating mothers were always eligible but this was not communicated clearly to all vaccinators. Recent research noted high rates of COVID-19 vaccine hesitancy among both health workers and the public because of fear of side effects and limited clinical trials of the vaccine.<sup>100</sup>

<sup>&</sup>lt;sup>99</sup> Data provided by UNICEF MENARO and Sudan Country Office.

<sup>&</sup>lt;sup>100</sup> Mohamed, A. E., Elhadi, Y. A. M., Mohammed, N. A., Ekpenyong, A., & Lucero-Prisno, D. E., Ill. (2022). Exploring Challenges to COVID-19 Vaccination in the Darfur Region of Sudan, The American Journal of Tropical Medicine and Hygiene, 106(1), 17-20.

Data showed that the initial round of COVID-19 vaccine promotion messages from the FMoH, supported by UNICEF, did not address women's need for gender-specific information related to their reproductive roles. Social listening, both online and offline, based on COVID-19 reporting, rumour tracking dashboards, the frequently asked questions on the FMoH website and feedback from field-based teams, revealed that women were concerned primarily about their fertility, the health of their unborn babies, and the safety of the vaccine during menstruation, pregnancy, and lactation. Interestingly, men too were concerned about fertility.

For example, Nawal Mohammad, a radio programme director in Khartoum and seven months pregnant with her first child said information on social media helped her understand that the vaccine is safe for women, including during pregnancy and breastfeeding. Her husband had taken both doses and reassured her that it was safe. Despite the messaging and her family's support for the vaccine she said she did not have the same level of confidence in COVID-19 vaccine as in other vaccines taken by generations of women who delivered healthy babies. She understood the risks and benefits and will take a COVID-19 vaccine as soon as she delivers her baby. She also felt exhausted because of her pregnancy and did not want to deal with side effects. She has completed her antenatal visits so far and has taken the tetanus vaccine. In this case, even though she did not take the vaccine we see an instance of informed decision-making, spousal conversation and support about vaccine safety and female agency.

Vaccinators and programme managers said one of the possible reasons for higher coverage for men was that in many cases they needed to travel overseas for employment to countries such as Saudi Arabia that required vaccination. There was also a perception that because men were out of the house more often, they needed to be protected, while women who were mostly at home would be safe. On the other hand, men working in the informal sector found it challenging to take time off from work. As the primary bread winners for their families, they did not want to lose wages if vaccination involved long waiting times.

Some of the service delivery issues were women's need for privacy and preference for a closed space for vaccines. In more conservative areas, women were not comfortable exposing their arm to male vaccinators. Women were hesitant to be vaccinated in an open area, such as outside the vaccination centre or in a public space, even where there was a female vaccinator.

#### The intervention – Social listening

Social listening may be online through social media platforms and offline through interpersonal communication with community mobilizers, field-based project staff and service providers. The goal is to understand barriers to vaccine uptake and address vaccine hesitancy among community members (adults in specific age groups and priority categories such as health workers or those with underlying health conditions). Initially social listening was used as a monitoring tool to capture the response to demand creation and service delivery efforts and allow for immediate improvements, but gender differences became evident early in the process.

Social listening is part of the Voice and Space Initiative (VASI), an inclusion platform that promotes the voices of marginalized groups. VASI aims to create an integrated evidence generation and feedback system using community and digital engagement tools to make rights-holders aware of their rights and engage them in the change process. VASI works in conjunction with other digital (online) and community engagement (offline) tools such as Community Voice, U-Report and Rapid-pro and integrates Accountability for Affected Populations, risk communication and community engagement (RCCE), community-based feedback and monitoring.

The intervention drew on data captured through the Talkwalker application which UNICEF Sudan has been using since August 2021. Key words and topics featuring on social media feeds such as COVID-19, handwashing, and face masks are entered into the system, then tracked, generating a dashboard which is monitored weekly (see **Figure 38**). UNICEF partnered with the Ministry of Health to coordinate the social listening component. Reports on offline and online social listening and findings from the Talkwalker dashboard were shared on a monthly basis at national technical committee and coordination meetings.



#### Figure 38. Talkwalker dashboard



To address both women's and men's concerns, UNICEF produced four gender-oriented messages and disseminated them through Facebook, Twitter and Instagram accounts (see **Figure 39**). The first set of messages (dark blue) emphasized vaccine safety during pregnancy, reiterated that there is no scientific proof that the vaccine adversely affects women, reassured women that they can have healthy babies and stressed that the antibodies in the vaccine do not affect fertility (light blue). Messages also emphasized that the vaccine is safe during menstruation and there is no need to delay vaccination due to menstruation (red) and lactation (green).



#### Figure 39. Initial round of gender-oriented messages

The social media campaign included testimonies and advice from medical experts such as gynaecologists. TV and radio messages focusing on pregnant and lactating women were also broadcast. A factsheet for women was developed, pre-tested and disseminated (see **Figure 40**).



Community engagement activities such as group meetings and home visits by health promoters (mostly female) aimed to reach those left out of the social media campaigns and to reinforce messages for those who may have limited Internet access. Orientation sessions for women were also conducted at the health centres and in communities.

In January 2022, vaccines were delivered in fixed sites such as health facilities, temporary or mobile sites such as mosques and outreach services in hard-to-reach areas and frequently visited spaces such as marketplaces.

#### Case study 5

Abdelazziz Abdallah, a male vaccinator from Wad Amahi in Blue Nile State, described how he has been promoting vaccine safety. He publicized the fact that he had been fully vaccinated, as had his wife who was expecting a baby. In a video sharing his personal story, he shows his vaccine certificate, asks people to contact him if they have any questions and cheerfully invites community members to attend the *Simaya* (naming ceremony), an important milestone and celebration in Sudanese culture, conducted on the seventh day after a child is born.

### Figure 41. Vaccinator, Blue Nile



Abdelazziz is from a farming community and uses local analogies to promote vaccines. For instance, farmers place importance on choosing a good pair of shoes to protect them from thorns and foot infections when working the fields. Abdelazziz compares the vaccines to a good pair of shoes. Emphasizing that prevention is better than cure, he reminds people that once you get infected the vaccine will not cure you.

The male engagement component of the outreach strategy leverages the social influence of religious leaders. Bushara Abdallah Bushara, a religious leader from North Darfur, has been vaccinated and includes messages about vaccine safety in his preaching, tackling rumours and misinformation. He stresses that the Ministry of Health would not promote something that is not safe and reassures his congregation that vaccines are not forbidden by Islamic law (*haram*). Many members of his prayer group have followed his example and taken the vaccine.

In the next campaign phase, 'Says who?' and 'Your story matters', posts emphasized the reliability and source of information and shared stories about concerns to counter misinformation and rumours (see **Figure 42**).

### Figure 42. Messages on breastfeeding and fertility from the 'Says who?' campaign





#### Figure 43. Religious leader and mobilizer, North Darfur

## Scope and coverage

UNICEF Sudan uses social media for information dissemination, community feedback and evidence generation. Tools such as U-Report, Internet of Good Things (IoGT), and Interactive Voice Response (IVR) allow for two-way communication with youth and adults. Marginalized groups and those without access to social media are reached through community engagement activities. At the time of writing the UNICEF Sudan Facebook page had 430,000 followers; of the 191,180 likes 42 per cent were female and 58 per cent male (see **Figure 44**). The social media campaign was implemented through the Facebook pages of the Federal and State Ministry of Health; as of April 2022 the FMOH had 34 per cent female and 66 per cent male followers. As of March 2022 the social media campaign reach was around 8 million.



#### Figure 44. Age and gender disaggregation of UNICEF Sudan Facebook page likes

## Budget

Four social media campaigns have been implemented, each costing \$6,000, with funding through the COVID-19 vaccine deployment support (CDS) early access funds from GAVI.

## Timeline



## **Vaccinator perspectives**

The local EPI team decides whether to mobilize a male or female vaccinator depending on the location and acceptability of male vaccinators. Female vaccinators are well accepted by their communities and their families are used to them traveling to remote places and working for long hours. Female vaccinators rotate remote visits among themselves so they do not have to be away from their families for extended periods. Families are more accepting of male vaccinators if they speak the local language and belong to the community.

Insaf Muhamadain from North Darfur is 39 years old, has been working as a vaccinator for nine years, and is proud to have vaccinated her three children. Because of the history of the conflict, people are used to seeing women working in the health or humanitarian sectors. Insaf shares a story where a father refused to complete his child's polio vaccination because the baby developed fever after the initial vaccination. She explained the side effects and gave the example of how polio could be debilitating for life.

Her centre is well organized, and she does not face any barriers because of her gender. She notes that they do not have separate toilets or a designated prayer space but wait for male colleagues to leave and then pray. Transport is a challenge because the centre is far from her house. She says the best part of her job is when families pray for her and thank her for her service.

### Figure 44. Vaccinator, North Darfur



## **Achievements**

As part of COVID-19 RCCE efforts, UNICEF and partners have reached over 16 million people through a range of platforms. More than 90 per cent of participants in a survey conducted by UNICEF demonstrated sufficient knowledge about symptoms, transmission of, and precautions against COVID-19.<sup>101</sup> The social listening intervention needs to be understood as a part of the broader RCCE and SBC COVID-19 response. Vaccine coverage increased from 6 per cent to 11.53 per cent of the target of vaccinating 20 per cent of the population by June 2022. Currently disaggregated data are not available and changes in female coverage cannot be compared.

Although it is not possible to directly attribute uptake of vaccine to the intervention, social listening informed gender-responsive messaging, provided a space for women and men's concerns to be voiced, addressed vaccine hesitancy and resulted in enhanced female engagement on social media. Importantly, women were able to share their questions and fears and receive accurate information. The intervention focused on understanding gender-specific barriers and rapidly responding to them to promote vaccine equity.

Data from the Sudan dashboard on social listening (Talkwalker Application) show an increase of 144 per cent in overall engagement during the campaign, with sharp rises in female engagement after gender-responsive messaging. In August 2021 engagement was 31 per cent female, 69 per cent male. Following the gender-oriented social media campaigns from September to October 2021 and from January to February 2022, female engagement increased to over 40 per cent. Figure 45 tracks social media engagement over time and after bursts of gender-focused messaging. Some drops noticed later in the campaign may be related to pandemic fatigue and the easing of travel vaccination restrictions for those who were getting vaccinated primarily for travel to neighbouring countries.

<sup>101</sup> UNICEF. (2021). Health Annual Report. UNICEF Sudan.

#### Case study 5



#### Figure 45. Female engagement during the campaign

Social media posts show that women are discussing their concerns and making choices. One Facebook post states, "I am pregnant and travelling and need a certificate. Is it safe?" Social listening also reveals some unintended consequences where women were proactively taking the vaccine as a means of birth control and men were avoiding the vaccine, fearing infertility. One post that generated a lot of discussion claimed that the reason a high number of women were taking the vaccine was probably because they did not want more children, indicating the need to counter misinformation about fertility and vaccines. Real-time monitoring and feedback loops allowed for tailored and gender-responsive programming (offline and online – messaging and outreach). Social listening informed advocacy efforts to make vaccination centres more gender friendly and to deploy female vaccinators. The rapid feedback and adaptation was particularly important for a pandemic response.

The real-time monitoring and feedback from online and offline sources allowed for ongoing analysis and data on gender-related barriers. Social listening enabled a sound understanding of the needs of both women and men in information and demand creation and service delivery. Social listening therefore became a valuable tool to learn, adapt and improve programming to overcome gender disparities in information dissemination, feedback and monitoring. The social media posts were designed based on insights from social listening and hesitancy or rumours were addressed instantly.

## **Lessons learned and recommendations**

Two key innovations are the rapid real-time feedback and the large-scale tracking of feedback and data through social media. In Sudan, tracking and assessing data from the state to the federal level can be time consuming and opportunities for timely adaptations or improvements may be missed. Social listening enabled the campaign to provide tailored and gender-sensitive information to women. Without social media, this scale of coverage and feedback would be resource-intensive. One improvement would be integrating the offline and online listening and adding the same level of rigour and systematic tracking for the offline component.

Social media engagement favours those who are literate and have access to social media and technology. It is estimated that around 13.7 million people (31 per cent of the population) have Internet access.<sup>102</sup> Disaggregated data on gender, age, education, disability, ethnicity,

<sup>&</sup>lt;sup>102</sup> DataReportal. (2021). Digital 2021: Sudan.

geographical location and socio-economic status are currently unavailable. Such data would provide further insights on vaccine inequities and allow for more nuanced programmes. In the future, social listening could provide important insights on other dimensions of women's lives, addressing their multiple roles and broader gender norms and harmful practices (see **Figure 46**).



#### Figure 46. Gender-responsive programming

Building the capacity of national partners to institutionalize and scale up social listening is required to sustain momentum and provide longitudinal data on a regular basis. Strengthening systems for real-time feedback to be generated and analysed can improve programmes and enhance community engagement. Currently UNICEF Sudan is conducting a Human Centred Design (HCD) training and there is an opportunity to use HCD to further address gender inequities in routine as well as COVID-19 vaccination. As part of the public–private partnerships there is a plan to collaborate with the DAL group, Sudan's largest food and agri-business conglomerate, and use their mobile bakeries to engage women and raise awareness about COVID-19. Looking beyond COVID-19, social listening can be a valuable tool to inform programme delivery and design and bring in the voices and concerns of women, children and marginalized groups. Social listening and social media can also be used to promote broader behaviour change initiatives and gender transformation by triggering conversations around gender equality and challenging inequitable norms.

Valuable contributions and support for this case study were provided by Hiba Ali, Islam Ahmed and Sehrish Ali from the SBC team in UNICEF Sudan. This case study draws on available documentation provided by UNICEF Sudan, key informant interviews with the SBC team and interviews with vaccinators, mobilizers and a pregnant woman in Khartoum, North Darfur and Blue Nile States.



## **Case study 6**

# Mother to Mother Clubs and promoting essential family practices in Yemen

"My biggest success is being able to convince many women in my village about the benefits of immunization and seeking health services. My biggest challenge is managing my family responsibilities along with the club leadership. I have a big family and many children who need lot of attention and care, this sometimes makes me unable to have enough time to raise awareness among women in my village."

Abeer Almadary a M2M Club leader from Alshair District

## **Background and context**

Yemen has 4.2 million internally displaced people – close to 80 per cent women and children – one of the largest internally displaced populations (IDP) globally. Seven years of conflict have significantly set back development gains. Over 20 million people are in need of humanitarian assistance. Social services and health systems that were already struggling have deteriorated further during the COVID-19 pandemic. Fewer than 50 per cent of health facilities are functioning and those that are operational lack specialists, equipment, and basic medicines. These gaps especially impact services for the most vulnerable women and children.<sup>103</sup> IDPs, children living with disabilities (CLWD) and marginalized groups are among the most vulnerable groups.

The country is faced with acute poverty, economic collapse, food and fuel shortages. According to the 2021 Global Multidimensional Poverty Index (MPI), more than half of the population (51.6 per cent) is living in multidimensional poverty.<sup>104</sup> The conflict escalated in 2021, with increased displacement further straining humanitarian assistance and adding to the difficulties faced by already overcrowded camps. There are no reliable data for people with disabilities (PWDs) in Yemen but WHO's global estimate that 15 per cent of any country's population comprises PWDs suggests that 4.6 million people have some form of disability. With the ongoing conflict and injuries to civilians, the actual number of PWDs is likely significantly higher.<sup>105</sup>

<sup>&</sup>lt;sup>103</sup> UNICEF. (2021). Yemen Country Office Annual Report. UNICEF Yemen.

<sup>&</sup>lt;sup>104</sup> UNICEF. (2022). Yemen Country Office Humanitarian Situation Report. UNICEF Yemen.

<sup>&</sup>lt;sup>105</sup> Amnesty International. (2019). Excluded: Living with disabilities in Yemen's armed conflict.

## Figure 47. Child with a vaccination card



Children's health and survival have been seriously impacted by the war. Common childhood illnesses including pneumonia and acute watery diarrhoea continue to plague families. Vaccine preventable disease (VPD) outbreaks such as cholera and the reemergence of diphtheria, measles and polio pose serious public health challenges.<sup>106</sup> At least one child dies every 10 minutes because of pneumonia, diarrhoea, fevers or VPDs. Only 84 per cent of children under the age of one have received three doses of diphtheria-tetanus-pertussis (DTP) vaccine (considered a proxy indicator for a fully immunized child) and 76 per cent under the age of one have received the first dose of measles-containing vaccine (MCV1). An estimated 5 million women and girls of childbearing age and 1.7 million pregnant and lactating women (PLW) have limited or no access to reproductive health services. The COVID-19 pandemic has further compromised an already fragile health system. Roughly 15 per cent of the functioning health system has been re-purposed for COVID-19 response.<sup>107</sup>

## **Gender barriers**

Ranked last in the Global Gender Gap Index for 13 consecutive years, Yemen is a highly patriarchal society with rigid gender roles and deeply entrenched gender inequality.<sup>108</sup> Several gender disparities have been exacerbated by conflict and displacement. Structural inequities hamper access to basic services, leading to gender gaps in literacy and basic education. Few women participate in formal paid work.<sup>109</sup> Women also bear the heavy burden of housework. On average, women spend 8.7 hours a day on tasks including cooking, cleaning and childcare, compared to 2.8 hours for male household members.

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<sup>107</sup> UNICEF. (2019). Yemen Consolidated Emergency Report. UNICEFYemen.
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<sup>108</sup> Amnesty International. (2019). Yemen: One of the Worst Places in the World to be a Woman.
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<sup>109</sup> UN Women. (n.d.). Overview: Arab States.

<sup>&</sup>lt;sup>106</sup> Yemen is the only country in the world with an active circulation of both circulating Vaccines Derived Polio Virus type 1 and type 2 at the same time. The outbreak of the circulating Vaccine-Derived Polio Virus type 1 (cVDPV1) continued in 2021. Since June 2021, a total of 35 cases of cVDPV1 were reported in the country. In November 2021, an outbreak of Vaccine-Derived Polio Virus type 2 (cVDPV2) was reported with a total of 16 cases.

Women and girls have lower access to livelihood opportunities, protection and political processes. Women often require a male family member to accompany them to health facilities that do not provide gender-sensitive health services. They also have limited access to information, whether regarding their rights or their health. Many men and young boys have lost their lives or been injured in the war. Others are forced to stay behind and fight while women and children flee. This leads to an increasing number of female-headed households.<sup>110</sup>

Restrictions on women's mobility, as well as the lack of female health workers and medical staff in remote rural areas, make it difficult for women to access basic health services for themselves and their children. Yemen has a high maternal mortality rate – estimated at 148 deaths per 100,000 live births – and more than half of deliveries are not attended by skilled medical professionals, due in large part to a lack of female skilled birth attendants in rural areas. Families are increasingly unable to cover the costs of transportation to health facilities outside their districts. Pregnant women in rural areas, children under five and people suffering from chronic diseases are particularly disadvantaged by the lack of gender-sensitive health services.<sup>111</sup>

Although Yemeni social norms have traditionally placed men as the source of family authority, years of war and upheaval are driving social change. The conflict has put women under more economic pressure, as they struggle to provide for their families, sometimes with little or no experience in income-generating activities. IDP boys and girls face problems accessing education and other essential public services, often because they lack documentation such as birth certificates or because their caregivers lack identity documents.<sup>112</sup>

## The intervention – M2M (Jaadati) Clubs

UNICEF and partners have been promoting an integrated social and behaviour change communication initiative focusing on core household care practices. Mother to Mother (M2M) Clubs have been established since 2019 to improve knowledge and uptake of maternal and child health protective practices. M2M Clubs provide a forum for mothers to learn, share and discuss issues related to child survival, well-being and development.

The initiative addresses five key family practices and emergency issues or outbreaks such as cholera or COVID-19 (referred to as 5+1):

- 1. Exclusive breastfeeding followed by age-appropriate complementary feeding
- 2. Immunization against childhood illnesses
- 3. Handwashing with soap at critical times
- 4. Safe motherhood and new-born care
- 5. Seeking early care for children and other family members
- 6. Emergency issues and outbreaks

<sup>&</sup>lt;sup>110</sup> OCHA. (2015). Gender considerations in the Humanitarian Response in Yemen.

<sup>&</sup>lt;sup>111</sup> Care International. (2016). From the Ground Up: Gender and conflict analysis in Yemen.

<sup>&</sup>lt;sup>112</sup> OHCA. (2021). Humanitarian needs overview Yemen.

#### Case study 6

M2M Clubs aim primarily to reach mothers but include fathers, adolescents and family members. Their objectives are:

- 1. Parents and caregivers have comprehensive knowledge and understand the importance of the core family care practices that impact child survival, development and protection, including preventing and responding to disease outbreaks.
- 2. Fathers and men including opinion leaders have positive attitudes towards the core family care practices including maternal, infant and young child nutrition.
- 3. Members of households (parents, caregivers, boys and girls) in targeted locations adopt and practise at least four essential family care practices for infant and young childcare, survival, development and protection, including responding to outbreaks.
- 4. Schoolchildren and adolescents have the knowledge and skills to support family and community adoption of positive household practices.

An M2M Club brings together 10–15 mothers to learn about and share experiences about the 5+1 practices. The meetings are led by a club leader (*Jaadatina*) selected by the group and supported by a community volunteer. Participatory tools such as role plays, songs, discussion and stories are used. The club meets for two hours twice a month.

The club builds on social networking, observational learning and role modelling by peers and influential community members. Each club member is expected to share what she has learned with at least five houses in her neighbourhood. Members report back and discuss the challenges, questions, or misconceptions faced in promoting the messages. The structure and reporting mechanism is illustrated in **Figure 48**.



#### Figure 48. M2M Club organization

Any mother, grandmother or caregiver of a child under five who lives within 20 minutes' walking distance of where a club meets may join. Group members should be accepted by the local community and respected by community/households. The leader is ideally an elderly female with adult or adolescent children, who is respected and well liked by the women and the community. The leader is trained by the community volunteer and is responsible for organizing meetings and informing members when and where the meeting will be held. In addition to the home visits, members also mobilize households to participate in community activities that will benefit their families such as immunization campaigns.

M2M sessions build on the life cycle approach. Practices are covered sequentially (e.g., discussions on breastfeeding are followed by complementary feeding). Simple illustrated take-home booklets and stickers highlight each practice and ensure that mothers/caregivers have a tool to continue dialogue with households and their peers. The learning extends beyond the club meetings. Following a cholera outbreak, mothers went door-to-door raising awareness in their communities. They have been a part of COVID-19 prevention efforts and reinforced messages through awareness-raising sessions and home visits. During the pandemic, mothers were making up to 100 masks a day and distributing them to families while promoting preventive practices such as social distancing and frequent handwashing.



### Figure 49. M2M Club meeting

In some regions, M2M Club members have also learned income-generating skills. They mobilized to buy sewing machines and are making masks and clothes for sale and distribution.

Nabila Mohamed Nasher, a project officer working in an IDP camp in Aden, explains how reaching mothers provides a pivotal entry point to reach families. Once mothers begin to adopt preventive practices, others in the family follow. "We target IDP camps. People there live in tents, which are rather small. We talk to mothers inside their tents, and we get a chance to talk to fathers and older women outside them. That way, we reach both parents with our awareness messages."<sup>113</sup>

<sup>&</sup>lt;sup>113</sup> UNICEF. (2022). Consistent Building Up of Awareness Saves Lives: Persuading people to adapt new practices would secure a clean environment and better health for them. UNICEF Yemen.

Amal, a 22-year-old mother from Taizz Governorate, described how the sessions helped her and her peers learn about taking better care of their children. "Some women did not know the timing of complementary feeding. I learned how to protect myself and my child from infectious diseases. We did not know before that there were vaccines for pregnant women, or that child immunization is a right." Umm Abdul Rahman Al Sufi, a club leader from Al Asa'da village, explained that "At the beginning of our work, we met mothers who did not know the meaning of safe motherhood. We educated them on nutrition and personal hygiene, disease prevention, and the necessity of getting vaccinated."<sup>114</sup>

A club leader from Alshair District in Ibb Governorate, interviewed for this case study, described some of the barriers women face in accessing vaccination and health services. Daily responsibilities and the burden of looking after the home and many children leave a mother with little time to promote health behaviours or seek services. When her children are sick, she makes sure she visits the health facility. Some women and men are not fully informed about the importance of vaccines, they believe in rumours and fear side effects. The M2M Clubs promote key messages on life-saving practices to raise awareness and counter misinformation. One of the barriers faced by women and men is periodic vaccine shortages. As a woman she has not experienced any discrimination by health workers. She adds that families living in rural areas have difficulty reaching the health facility as it is far from their villages and transportation is expensive. She reported that typically parents make joint decisions. "The fathers often make decisions regarding the future and education of the children, while the mothers are responsible for household matters." It is usually the mother who takes the child for vaccination. She explained that whichever parent was more educated and informed about the vaccine could encourage the spouse to get themselves and their children vaccinated.

The M2M Clubs were conceived as a women-focused initiative. Given women's central role in families, mothers were targeted as a powerful entry point to improve the health and well-being of families. The initiative is supported by a large pool of female community volunteers and field officers and the club membership is 100 per cent female. Improved awareness and skills of female volunteers, club members and leaders enables enhanced participation and agency at both the family and community level. Although the primary audience is mothers and caregivers of children under five, boys, girls, elder women and men also participate in activities and events. Grandmothers as custodians of household childcare practices are also encouraged to be positive models. The home visits and community mobilization activities promote change to other women and their families and influence changes in health behaviours as well as gender norms.



#### Figure 50. Women as health promoters

<sup>114</sup> These testimonies are taken from <u>UNICEF. (2022). Raising Awareness for Safe Motherhood. UNICEFYemen.</u>

## Scope and coverage

As of early 2022, a total of 946 clubs had been established in 12 governorates across the country (see **Figure 51**). The clubs reach an estimated 70,000 pregnant women, lactating mothers, and mothers of under-five children every month.



## **Budget**

The clubs are usually established as part of a comprehensive agreement with implementing partners. The budget varies depending on the location, the duration, the and type of SBC interventions to be conducted. The estimated cost of establishing and maintaining a single M2M club of 15 members for a year is about \$3,000.

## Timeline



## Achievements

The M2M Clubs are part of broader social and behaviour change (SBC) activities implemented by UNICEF Yemen. The multi-layered approach includes a complementary mix of communication and social mobilization activities including television and radio programmes, interpersonal communication, distribution of communication materials, and engagement of religious leaders, community volunteers and M2M Clubs. UNICEF-supported SBC interventions have reached about 10.7 million people. These efforts include the M2M Clubs and aim to promote demand for services, uptake of protective practices, empowerment and community-led accountability.

## Figure 52. SBC achievements in Yemen in 2021



Source: unicef.org

UNICEF has continued to strengthen the polio, cholera and COVID-19 response, supporting access to vaccination, increasing vaccine demand and promoting preventive behaviours.<sup>115</sup> According to a report published by UNICEF, campaigns in 2021 vaccinated 817,475 children under five for measles and 3.8 million for polio. In the region under the control of the Internationally Recognized Government (IRG) – where the COVID-19 vaccination is being rolled out—2.32 million people in 13 governorates were reached through various interpersonal communication activities by Community Volunteers (CVs), members of M2M Clubs and religious leaders. Through 25 radio stations and six television channels, over 5.5 million people were reached with public service announcements and discussion programmes. Religious leaders scaled up COVID-19 related communication in over 5,000 mosques, during *Jumma* (Friday) prayers, as well as in schools, communities and social gatherings, engaging around 6.8 million people in the past year. Additionally, CVs and members of M2M Clubs engaged 3.9 million people with life-saving family practices and messages on COVID-19, cholera and nutrition through house-to-house visits, women's sessions, school-based activities, and puppet shows. In a positive development, in 2021, Yemen witnessed the most significant reduction in cholera cases since the height of the epidemic in 2017.<sup>116</sup>

and non-formal education

<sup>116</sup> <u>Ibid.</u>

<sup>&</sup>lt;sup>115</sup> UNICEF. (2021). Consolidated Emergency Report. UNICEF Yemen.

## Figure 53. Learning a trade



Monitoring reports for the M2M Clubs highlight that the initiative has contributed toward positive changes at the community level with increased awareness and improved health and hygiene measures being adopted by families.<sup>117</sup> The integrated approach of providing a space for women to engage and adding a livelihood component led to self-reliance and income generation, enabling women to financially support their families. Programme participants also reported that the outreach activities met their needs and that the health promoters possessed effective communication skills. For instance, 75 per cent of beneficiaries in Al Husha district, Al-Dhale'e Governorate, thought that the awareness-raising activities had contributed to disease prevention and improved community health.<sup>118</sup>

According to an assessment by the United Nations High Commissioner for Refugees (UNHCR), 64 per cent of internally displaced families have no sources of income. As a result, two out of three internally displaced families resort to negative coping mechanisms to survive, including limiting food intakes, skipping meals, pulling their children out of school, or neglecting their health. Some may end up street begging.

Among the clubs where UNICEF provided sewing machines, income generated from tailoring has become a primary source of income for many displaced women. Haneen Yahya, a 25-year-old M2M Club member from Al-Sha'ab Camp no. 1 in Aden explains, a"Now, I can sew curtains, pillowcases, and robes. I can also sew Indian suits, pajamas, dresses, and baby clothes. I learned so many things!" Initially Haneen was hesitant to join the sewing workshop and thought it would be difficult. Life in the camp was difficult and her husband is a daily labourer who works when he gets a chance. Sometimes the family didn't have enough food on the table. Haneen decided to learn sewing to help provide for the family: "I feel like I am taking a step toward improving my everyday life. I am no longer helpless."<sup>119</sup>

<sup>&</sup>lt;sup>117</sup> Monitoring Reports from Al-Husha, Malla and Darr Saad Districts. (2021).

<sup>&</sup>lt;sup>118</sup> Monitoring Report from Al-Husha District. (2021).

<sup>&</sup>lt;sup>119</sup> UNICEF. (2022). A Step Towards Empowerment for Displaced Mothers. UNICEF Yemen.



#### Figure 54. M2M Clubs discussing COVID-19 prevention

A brother of a M2M Club leader shared how he has noticed several positive changes in his village since the club started. He recalled how hygiene awareness had improved, many homes now had a designated area for waste and there was "no rubbish thrown on the streets, hygiene campaigns were frequently conducted, roads were cleaner and families were building home gardens". Mothers were also paying more attention to their children's education as well as health. He situates these changes and the efforts of these women in a context where women bear the heavy burden of household responsibilities and face restrictions on their mobility and equal participation in society.

The initiative is transformative and contributes towards gender equality. Participation in M2M Clubs changes how women are perceived and valued in society. These women have become active agents of change as they spread awareness and mobilize community members to promote health and wellbeing. The initiative provides a rare opportunity for them to express themselves freely and connect with other women. Given the conflict situation, the club meetings are a safe space where women do not feel curtailed or watched. Though focusing primarily on women the initiative engages men, adolescents and community influencers for long-term social change.

## **Lessons learned and recommendations**

In Yemen, women do not have many opportunities to engage with one another. The M2M Clubs provide a space for them to come together and gain knowledge and skills that can improve the health and well-being of their families. As a mother notes, "I can't see myself not coming here every day, …I love how the teachers here take care of me and I come here to meet with my friends because this is the only place for us as girls to meet and see each other."

Home visits ensure that awareness-raising activities and messages reach a wider network. In six months, 350 members of M2M Clubs in the governorates of Abyan, Lahj and Socotra had reached 45,000 people with integrated life-saving messages on preventive practices including immunization. Importantly, being community-level mobilizers and agents of change is empowering for women. They are viewed as women with knowledge and are valued by other women, men and community members. The social capital, respect and trust built among club members are an important dimension of social change. Especially for women who have been displaced, in some cases multiple times, these clubs promote cohesion and instill a sense of purpose and agency.

The M2M Clubs needs to be seen as a part of a broader SBC and community engagement initiative. The benefits go beyond immunization and bolster several areas of health and well-being of children, women and ultimately families. The hygiene promotion efforts linked to cholera and COVID-19 outbreaks yielded community-level benefits, particularly in IDP camps where several families live in close proximity.

Home visits, often in crowded camps, allow for information to spread to family members such as spouses, in-laws and older children, answering questions, quelling rumours and misinformation and providing reminders and behavioural nudges. Receiving information from trusted messengers who people consider to be one of them and who face similar situations (homophily) increased acceptance and uptake of recommended practices. Distribution of supplies such as masks and soaps were further enablers for behaviour change.

The approach can be used to address a range of issues beyond health. The clubs can be a space for women to engage on preventing violence against women and children and ending harmful practices such as child marriage and female genital mutilation. Future assessments need to understand how the clubs are impacting gender norms at the community level and roles within households. In terms of vaccine uptake, it is important to know how health and vaccine decisions are being made in the household and whether or not men support spouses in childcare, including health seeking and taking children to the health centre. Experiences from Yemen can improve our understanding of changing gender roles and responsibilities when women find themselves heading households and families due to war.

Challenges include resistance to establishing clubs and organizing women's groups in the northern region. The volatile security situation also impacts the establishment and the regular functioning of clubs. The initiative requires close oversight and coordination with the implementing partners and ensuring consistent and ongoing feedback mechanisms, which can be challenging in a conflict situation. Funding constraints also limit expansion. Monitoring reports note the difficulty in meeting the high demand for COVID-19 vaccines through mobile vaccination drives in densely populated IDP camps.

In sum, the M2M Clubs promote women's participation and contribute to routine immunization among both expectant mothers and infants. Through the sessions and home visits they counter vaccine refusal and hesitancy and provide reminders to complete/follow the recommended schedule. Having a pre-existing group that meets regularly provided a base for risk communication and community engagement during the COVID-19 pandemic. Through the integrated 5+1 package mothers were able to raise awareness and promote protective practices across health, nutrition and hygiene for their families and those in their community.

Valuable contributions and support for this case study were provided by Dennis Chimenya, Fatima Al Agil, Abdullah Alshehari, Arwa Al Awadhi, Ansar Rasheed, and Karmen Al-Kubati from the SBC team in UNICEF Yemen. Yemen Health Organization conducted the interviews and provided photographs from Ibb Governorate. This case study draws on documentation and human-interest stories published on the UNICEF Yemen website.

## Conclusion

These case studies provide a detailed look at a range of approaches to address gender barriers posed at multiple stages of the vaccination journey. The role of demand promotion or SBC is key for understanding the importance of vaccines, addressing misinformation, fears and rumours, motivating and generating interest and intention to vaccinate, and ultimately making the decision to vaccinate. Demand also plays an important role in ensuring gender-responsive services and a more positive experience of care for women, girls, boys, men and gender diverse groups.

We see examples of evidence-based and gender-responsive communication in Sudan and Pakistan. In Mozambique and Yemen, community-based participatory approaches are highlighted. In Liberia we see the importance of converging demand and services and addressing multiple deprivations faced by urban and peri-urban populations. The Yemen case study illustrates how women gain social capital, trust and respect in a challenging context. In Rwanda the role of gender socialization and integrating mediated and community engagement is emphasized. All three examples of transformative efforts in Rwanda, Mozambique and Yemen point to the contribution of immunization to family health, child survival and development practices. The role of female health workers, vaccinators, mobilizers and change agents is also highlighted across the case studies.

Vaccine promotion is a major global health investment and while the lifesaving benefits are the primary focus, it can also be a pathway to gender equality. Broadening the focus of demand efforts from vaccine uptake and equitable coverage provides an important opportunity for gender equality, empowerment and norm change. With the development of new vaccines, the benefits of immunization are expanding beyond infancy to include adolescents, adults and older people and can be an opportunity for intergenerational change and for reinforcing vaccination as a community norm.

Addressing gender-related barriers to immunization not only leads to equitable coverage but contributes to gender equality and empowers women to access and claim health services. Healthier women can contribute to the well-being and development of their families, communities and countries. It is also important to recognize that gender includes women, men, girls and boys and the diversity within these groups as well as those who do not identify with or conform to binary notions of gender.

Planning interventions that contribute to immunization coverage as well as gender norm shifts require robust gender analysis, strategic planning and evidence-based design and adaptations. A common drawback noted across the case studies is the lack of data that assess gender-related shifts linked to immunization interventions. These include changes in decision-making within households, sharing of childcare responsibilities between spouses, male involvement in children's vaccination, and the impact of female health workers and change agents in fostering new expectations around women's role.

Empowerment and decision-making are important factors for health seeking behaviours and demand efforts that enhance women's empowerment and household decision-making can in turn influence vaccination coverage.<sup>120</sup> Children with mothers who had higher levels of social empowerment and agency were more likely to be vaccinated.<sup>121</sup> Likewise, women who believed that wife beating is not acceptable were also more likely to have their child fully immunized than those who believed wife beating was acceptable.<sup>122</sup> Additionally, vaccination among girls can improve equity indicators such as labour force participation and reduction in maternal mortality rates (Portnoy et al., 2020). These findings indicate that gender-transformative strategies can not only reduce childhood immunization inequities but also contribute to gender equality and women's empowerment and warrant continued investments in gender focused immunization interventions.



<sup>&</sup>lt;sup>120</sup> Gelagay, A. A., Geremew, A. B., Teklu, A., Mekonnen, Z. A., Sharkey, A., Assan, A., & Tilahun, B. (2021). Women's Independent Household Decision Making Power and its influence on their Autonomy in relation to Child Vaccinations: A mixed-method study among

<sup>&</sup>lt;sup>121</sup> Arsenault, C., Johri, M., Nandi, A., Mendoza Rodríguez, J. M., Hansen, P. M., & Harper, S. (2017). Country-level predictors of vaccination coverage and inequalities in Gavi-supported countries. Vaccine, 35(18), 2479–2488.

<sup>&</sup>lt;sup>122</sup> Singh, K., Haney, E., & Olorunsaive, C. (2013). Maternal autonomy and attitudes towards gender norms: Associations with childhood immunization in Nigeria. *Maternal and Child Health Journal*, 17(5), 837–841.

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