unicef Anthrologica

Data for Action:
Human-Centred Design, a people-centred approach to increasing childhood immunisation in Zimbabwe

A policy brief prepared by Anthrologica for UNICEF East and Southern Africa Regional Office, in collaboration with UNICEF Zimbabwe Country Office

May 2021

©UNICEF ZCO

Introduction

Global childhood immunisation coverage has improved markedly since the WHO introduced the Expanded Programme on Immunisation (EPI) in 1974.[1] In Zimbabwe, the immunisation rate has also risen steadily over recent decades due to the consistent supply of vaccines and outreach efforts by health programmes. Today, the national vaccine coverage rate is 86%.[2]

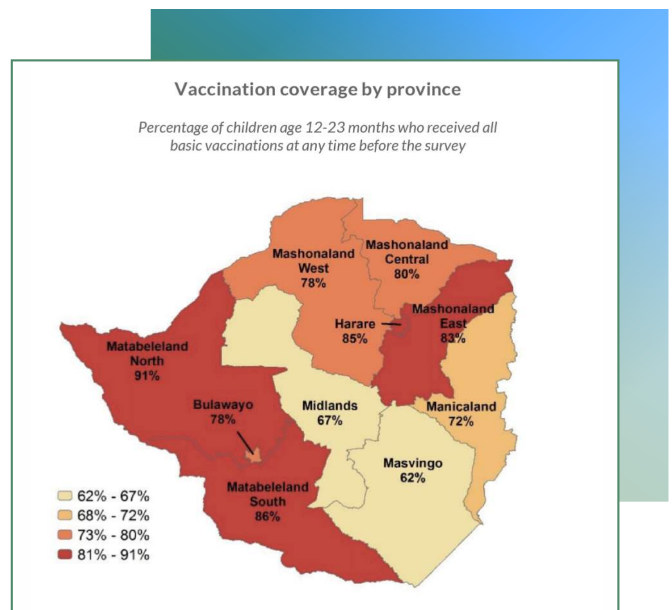
In 2018, the Ministry of Health and Child Care (MoHCC), supported by UNICEF Zimbabwe, conducted an Awareness, Knowledge, Attitudes and Practices (AKAP) study in 14 districts where immunisation rates were low. Findings from the study suggested that despite high coverage rates nationally, low-performing areas reported high concentrations of unvaccinated children. Most of these children and their families were members of the Johanne Marange Apostolic Church in the Manicaland province of the country.[3]

The MoHCC, supported by UNICEF Zimbabwe and consultants from The Nucleus Group (Nucleus), developed an initiative using Human-Centred Design (HCD) to identify the underlying drivers and barriers related to health-seeking behaviours for immunisation amongst this target population, and the steps to improve their uptake of services.

This brief provides an overview of how the HCD approach was used to develop a strategy for improving vaccination coverage in Zimbabwe. It also provides insights into how a number of the recommendations from the strategy have been implemented, and outlines considerations for the future use of HCD in this context. It demonstrates that by putting community members' interests and concerns at the forefront of programme development, effective approaches can be developed to improve vaccine coverage.

What is HCD?

HCD is a creative problem-solving process that is grounded in understanding the human factors and context surrounding an issue or challenge.[4] Its goal is to create an ongoing dialogue with the community and to ask tailored questions in order to understand more clearly the socio-economic, environmental, behavioural and cognitive drivers that shape decision-making.[5] It is rooted in the idea that the design of effective services must begin with understanding the needs and perspectives of those who will use the services, and the extent to which the proposed solutions will effectively meet their needs.[6]



Provincial vaccination coverage for children <23months

"The human-centred approach emphasises both the perspective and participation of the people we are trying to serve at every step, resulting in more inclusive, tailored and empowering solutions." [14]

In the context of vaccination, HCD provides a structured process for working with service users to better identify and address the barriers and the challenges related to vaccine acceptance and the quality of EPI services. HCD recognises that vaccine acceptance can be influenced by a number of social, economic, infrastructural and political factors.[7,8] Individuals engage in complex decision-making processes, particularly in matters regarding their health, and not all members of a given population will come to the same conclusions at the same time or through the same decision-making processes.[9] Identifying barriers to vaccination is therefore a critical first step towards promoting

acceptance and uptake in any given community. Addressing vaccine hesitancy through HCD can increase the likelihood of successful behavioural change because of its focus on three fundamental areas: direct engagement with users, collaboration between multiple stakeholders, and frequent testing and revision of ideas and solutions.[10]

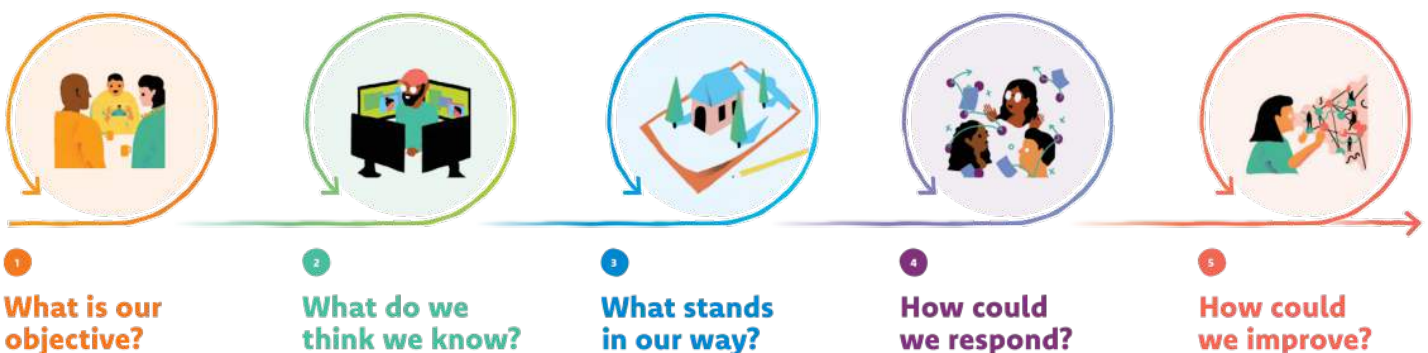
How did HCD inform EPI interventions in Zimbabwe?

Findings from the 2018 AKAP survey conducted by Nucleus indicated that Apostolic communities in Manicaland province reported very low immunisation rates. In response, MoHCC, supported by UNICEF Zimbabwe and Nucleus, developed an HCD initative that specifically engaged Apostolic communities where low coverage was most concentrated. The Manicaland initiative began in September 2019 with a 10-day workshop that brought together national and regional stakeholders with diverse perspectives including representatives from MoHCC, individuals working on EPI and nutrition, specialists in communications and public relations, and UNICEF and WHO personnel. The workshop had two aims: to build stakeholders' capacity in interpersonal communication skills and the use of HCD methods; and to provide stakeholders with an opportunity to use these new skills in rapid research to understand vaccine hesitancy among Apostolic communities in the province. The exercise allowed stakeholders to explore the barriers and enablers to vaccine uptake among the Marange Church members in Mutare district and to identify ways to promote demand for immunisation among members of the Apostolic faith across the country.

The workshop included a mapping activity to capture all actors who influenced a caregiver's journey to vaccination, including family and community members as well as broader social and health networks. Participants created personas for key gatekeepers in the community – developing a character sketch for each actor that included their expected perspectives on vaccination and their views of the barriers, influences and strengths of EPI. Using what they had learnt from the workshop, stakeholders conducted rapid inquiry to understand the many social, cultural, political and economic influences and motivations in a community.

The findings from the persona research were synthesised and key themes were drawn out to identify patterns of behaviour and common attributes and beliefs across groups. The synthesis was orientated towards solutions, and the analysis allowed workshop participants to formulate concrete steps to address the main barriers to full vaccine acceptance for each persona. Solutions were structured as 'How Might We…?' questions, for example *'How might we provide EPI services in a manner that the church can be comfortable with?'* or *'How might we make vaccination part of the belief system for prevention?'*

Following the fieldwork, stakeholders reviewed the gatekeeper personas they had created. Based on the data gathered in the field, they revised inaccurate assumptions and added new insights, including observations, ideas and challenges to be addressed. The challenges that emerged were then plotted on a map of 'Journey to Health and Immunisation' according to where the group perceived the solutions would have the greatest impact. Following further discussion, stakeholders



began to develop possible approaches to address vaccine hesitancy. They then returned to their home regions with a view to using community engagement to build local capacity to take these approaches forward. This included involving their communities in the process of testing and revising strategies to improve national vaccination coverage through local action. The process built community capacity and confidence in using the HCD methodology and thereby contributed to both the sustainability and scalability of the measures developed.

Research Findings

The key findings that emerged from the persona data suggested that caregivers **were open to receiving information about how to keep their children healthy and safe and were likely to follow religious leaders' guidance about vaccination.** Caregivers rarely reported their own opinions about vaccination, although men and other household heads said they felt unwelcome at health facilities because their way of life was not respected or understood. The data suggested that community engagement could be increased by providing incentives for caregivers to engage with health services.

Religious and traditional leaders can greatly influence their communities. Apostolic leaders who participated in this research said they respected the government and were willing to adhere to the law, including legislation related to immunisation. Traditional leaders also expressed strong support for health services and were willing to work closely with religious leaders to support immunisation. The findings revealed that **many people, especially women, who objected to accessing health services on religious grounds and publicly expressed resistance to vaccination, actually attended health services in secret**. Some participants reported observing a lack of political will to engage religious objectors. Others highlighted that the media were not used effectively to share health information with the community.

The Manicaland initiative concluded with a report from Nucleus that drew together the findings from the rapid inquiry and highlighted how HCD can be used for EPI interventions. **Five key priority areas for intervention in Manicaland emerged from the exercises: community dialogue; moving from treatment to prevention; improving access; increasing the legitimacy of health care workers; and engagement with the media**. The report outlined how the experiences from Manicaland could be worked into the national communication and demand promotion strategy and how HCD could be used with other vaccine-hesitant communities and with other health interventions. The EPI demand promotion strategy document that emerged from the Manicaland initiative reinforced **the need to understand barriers and enablers to vaccine uptake at the community level in order to increase demand.** It also underlined the **need to build community capacity to implement the HCD approach, in order to ensure sustainability and scalability.**

©UNICEF ZCO

How was the Manicaland data used to inform national recommendations?

MoHCC assumed ownership of the Manicaland initiative and decided to feed the findings into their EPI demand promotion strategy to improve vaccination uptake in other low-performing districts. Together, the Manicaland report and the MoHCC demand promotion strategy presented a range of recommendations that informed an integrated and holistic Reproductive Maternal Neonatal Child Health and Nutrition (RMNCH+N) Communication for Development (C4D) model. Drawing heavily on the Manicaland data, particularly regarding the influence of social networks on vaccination-related behaviours, the following recommendations were made:

- Leverage societal pressure to encourage caregivers to take children for vaccination because they perceive this action as an important social norm.
- Activate mother's groups, community meetings, and other grassroots community networks that play an important role in getting children vaccinated.
- Consider policy options to strengthen the approaches being deployed at the community level.
- Engage religious and political leadership in reaching out to families and households in communities with low childhood immunisation rates.
- Ground communication strategies in community engagement for the purpose of promoting dialogue, trust and listening skills. Dialogue should be directly targeted towards specific under-vaccinated population groups.
- Reintroduce the mobile vaccination clinics to create community awareness and improve vaccine accessibility.

Moving from research to implementation: The national HCD roadmap

Based on the recommendations made, a national HCD roadmap was developed that focused on five priority areas for future action: building community trust; developing mass media campaigns; building healthworker knowledge and practice; engaging in participatory monitoring and evaluation; and documenting good practice. The roadmap also listed key activities to be achieved in connection with each (see Table 1).

Building community trust: The HCD roadmap proposed a number of activities to engage influencers and hestitant groups through ongoing community dialogue. Activities included learning tours of low-coverage districts, community dialogue, and meetings to increase support for immunisation efforts. These activities involved a broad range of community members including faith-based groups, religious objectors, slum dwellers, urban elites and others in the community.

Developing mass media campaigns: In the context of COVID-19 the roadmap identified the need for a mass radio campaign. 'Live Well - the Health and Nutrition Show' was designed to promote demand for health and nutrition services, to provide caregivers with information, and to collect feedback from the population.

Building healthworker knowledge and practise: The roadmap outlined important activities to build the capacity of health workers and to complement training programmes, including the integratation of RMNCH + Immunisation interpersonal communication tools such as health worker and village health worker counselling cards within exisiting systems.

Participatory monitoring and evaluation: The roadmap called for the development of structured mechanisms to monitor the implementation of the demand promotion strategy in vaccine hesitant communities and support ongoing evaluation efforts.

Documentation of good practice: The roadmap included interventions to ensure the routine and continual documentation of good practices related to EPI demand promotion.

TABLE 1.

Priority Areas	Interventions	Activities implemented to date
Building community trust	Adaptation of community dialogue guides	The Apostolic religious sects, including the community-based Apostolic Women's Empowerment Trust, are engaging women as behaviour change facilitators through ongoing dialogue at religious shrines. Through community dialogue, interfaith leaders and community leaders have become champions promoting immunisation services during lockdown.
	Conducting tours of health facilities for community groups/members in low performing district	
	Trainer of Trainers for 20 District HPO on building their interpersonal communication and advocacy skills on how to conduct community dialogues to address religious and cultural norms among hesitant groups.	
	Facilitate community dialogue meetings by targeting religious and traditional leaders and community members in the 20 low-performing districts	
	Coordinate meetings with civil society organisations to build support for vaccination	
Developing mass media campaigns – The Live Well Radio Campaign	Develop integrated concept	The conversation about immunisation has been re-oriented from a focus on treatment to a focus on prevention, and mass media campaigns have been developed to advance this discussion. Using community radio stations in five provinces (reaching over eight million people), EPI specialists have shared tailored vaccination messaging that highlights the benefits of immunisation as a preventative intervention and have integrated these messages with broader RMNCH+N social behaviour change and communication campaigns.
	Contract community radio stations	
	Develop radio content	
	Weekly radio broadcast	
Building healthworker knowledge and practise	Integrate IPC toolkit orientation within ongoing VHW cluster trainings	Capacity-building exercises have been conducted with health workers to strengthen IPC and build skills for engaging specific groups. An interpersonal communication module has been integrated into training packages for community and village health workers, to build their confidence to address social norms among hesitant groups, such as the Apostolic community. This activity has helped to build community trust and to strengthen health worker knowledge and practice.
	Adapt integrated MNCH and Immunisation specific tool for integration within Health Centre Committee community feedback system	
	Adapt and integrate IPC and community engagement module within existing village health worker and health worker trainings	
Participatory monitoring and evaluation	Align monitoring and evaluation framework to Journey of Health	Routine project monitoring is underway as well as media monitoring focusing on reach and engagement across media platforms.
	Create a dashboard of demand promotion indicators is established and shared on a quarterly basis	
	Media monitoring for reach and engagement (social media platform and radio)	
	Conduct routine project monitoring activities	
	Undertake 3 field visits to monitor implementation of the demand promotion strategy in vaccine hesitant communities	
Documentation of good practise.	Produce documentation (human interest stories or lessons learned report) based on two field visits	Zimbabwe HCD report distributed at the EPI Managers Meeting in 2020. Further documentation planned for Q3-Q4 2021
	Field photo gallery on demand creation activities	

Considerations for future action

Using the data-driven HCD approach to **focus on the needs of intended beneficiaries and the local systems that surround them**, enabled the development of a tailored strategy to create demand for immunisation in Zimbabwe. The development of the national strategy to address vaccine hesitancy and demand generation is just one of Zimbabwe's overarching EPI goals. To ensure immunisation objectives can be achieved, **vaccination initiatives need to be integrated into other public health efforts.** Continued integration with the RMNCH+N C4D model can provide a holistic approach for addressing community barriers to wellbeing, encouraging uptake of essential services, establishing positive behaviours and empowering marginalised communities. **At the community level, integrated services have the capacity to increase uptake** and possibly reduce resistance to certain services, with community participation underpinning innovative solutions that are owned by communities.

Programmes that address 'demand-side' issues – i.e., factors that prevent individuals from seeking vaccination services – can be effective in improving the uptake of childhood vaccines delivered through routine immunisation services in low and middle income countries.

©The Nucleus Group

Through the initiative described here, UNICEF and the MoHCC successfully promoted factors that led to higher immunisation rates in key populations. **The HCD approach enhanced the effectiveness of the strategy and increased immunisation acceptance and uptake.** Data collected after the initiative indicate that the HCD approach is associated with increased vaccination uptake.

Conclusion

Immunisation services and the ways in which communities engage with them can be complex and multifaceted. Experiences from previous immunisation programmes highlight how traditional approaches can lead to mistrust and low uptake in some population groups.

©The Nucleus Group

HCD challenges practitioners, programmers and policy makers to question existing assumptions. HCD methods drive demand by embarking on a continuous journey to investigate and improve accepted ideas related to practices and services in a given context. **Solutions to vaccination uptake and acceptance are stronger if they are rooted in an understanding of human behaviours and motivations.** Lessons from Zimbabwe may help other countries to identify opportunities to overcome some of their vaccination challenges. In the context of COVID-19, it also provides key insights for the global roll-out of COVID 19 vaccines. HCD offers coordinated, adaptive, innovative, localised and participatory approaches to engage communities and encourage the uptake of vaccination over the coming months.

[1] Keja et al., 'Expanded Programme on Immunization'. World Health Statistics Quarterly. 1988, 41(2): 59-63. https://apps.who.int/iris/handle/10665/49253
[2] Zimbabwe: HIS Indicators — MEASURE Evaluation https://www.measureevaluation.org/his-strengthening-resource-center/country-profiles/zimbabwe
[3] Nucleus, UNICEF, MOHCC, 'Zimbabwe Strategy - EPI Demand Promotion Workshop'.
[4] UNICEF, 'Facilitation Guide - Overview, Objective & Assumptions.Pptx'.
[5] UNICEF, 'The Process'. Human Centred Design for Health. https://www.hcd4health.org/process
[6] DC Design, 'What Is Human-Centered Design?'. Medium. 2017. https://medium.com/dc-design/what-is-human-centered-design-6711c09e2779
[7] Brewer et al., 'Increasing Vaccination: Putting Psychological Science Into Action.' Psychological Science in the Public Interest:
[8] A Journal of the American Psychological Society. 2017, 18(3): 149-207. 10.1177/1529100618760521
'Building Vaccine Confidence Through Community Enga.Pdf'.
[9] WHO, 'Report of the SAGE Working Group on Vaccine Hesitency'.
[10] 'Applying Human Centered Design to Drive a Successful SARS-CoV-2 Vaccine Mindset I CGI United States'.
[11] Ryman, Dietz, and Cairns, 'Too Little but Not Too Late'.
[12] Oyo-Ita et al., 'Interventions for Improving Coverage of Childhood Immunisation in Low- and Middle-Income Countries'.
[13] UNICEF, 'Demand for Healthservices Fieldguide.Pdf'.
[14] UNICEF, 'Benefits of HCD'. Human Centred Design for Health.https://www.hcd4health.org/benefits-hcd

Acknowledgements: This HCD project was a collaboration between the Zimbabwe Ministry of Health and Child Care with technical support from UNICEF, WHO and JSI. The work was made possible with the financial support of GAVI under the Health Development Fund.

Author: Katie Moore, Senior Research Associate, Anthrologica, katiemoore@anthrologica.com
Leslie Jones, Senior Research Associate, Anthrologica, lesliejones@anthrologica.com

Reviewers: Emma Mafara, UNICEF Zimbabwe C4D Officer, emafara@unicef.org
Helena Ballester Bon, UNICEF ESARO C4D/SBCC Specialist, hballesterbon@unicef.org
Jenna Mote, ESARO C4D Knowledge Management Focal Point, jmote@unicef.org
Juliet Bedford, Director, Anthrologica, julietbedford@anthrologica.com

©UNICEF ZCO