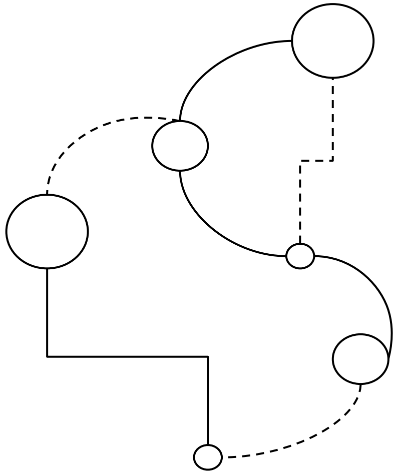
In partnership with Canada

Evaluating the use of co-created messages and trusted messengers to improve COVID-19 vaccine acceptance in Northern Nigeria



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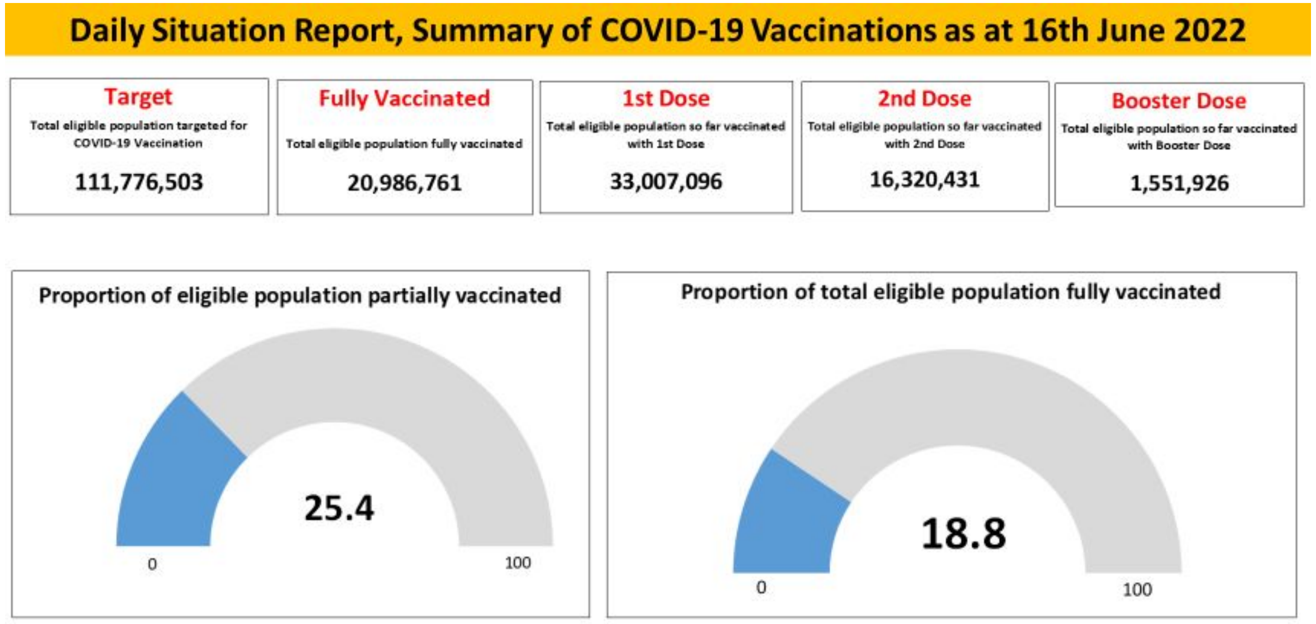
The Problem

- Although COVID-19 vaccines are now in adequate supply, Nigeria, like the rest of Africa continues to report low COVID-19 vaccine coverage.
- Less than 20% of the population have been fully vaccinated in Nigeria, in contrast to 67% in the US
- **Vaccine hesitancy (VH) rates are high among adults and health care workers (HCWs)** in Nigeria



Daily Situation Report, Summary of COVID-19 Vaccinations as at 16th June 2022

Target	Fully Vaccinated	1st Dose	2nd Dose	Booster Dose
Total eligible population targeted for COVID-19 Vaccination	Total eligible population fully vaccinated	Total eligible population so far vaccinated with 1st Dose	Total eligible population so far vaccinated with 2nd Dose	Total eligible population so far vaccinated with Booster Dose
111,776,503	20,986,761	33,007,096	16,320,431	1,551,926

Proportion of eligible population partially vaccinated

Proportion of total eligible population fully vaccinated

Source: NPHCDA COVID-19 Vaccinations National Daily Call-In Data

- Reasons for hesitancy were **conspiracy theories around the virus**, **the pandemic response**, and the **COVID-19 vaccine. Concerns about COVID-19 vaccine safety and effectiveness also fuel hesitancy,** and VH was higher in North Central and South-East regions[1]**.**

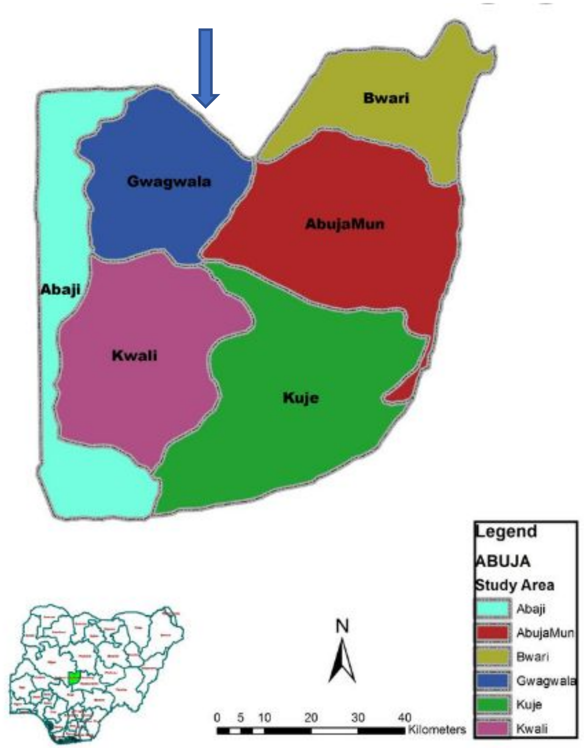
- The GoN through the NHPCDA is driving communication efforts to promote vaccine uptake. However, most of these efforts are centralized, producing modest effect on vaccine uptake.

- There is a need for effective approaches to inform and influence communities to increase their demand for, and uptake of COVID-19 vaccines.

- Having trusted messengers deliver targeted messages that respond to community concerns, holds promise for achieving the behavioral shifts that are needed to raise COVID-19 vaccine coverage in Nigeria

[1] Wonodi C, Obi-Jeff C, Adewumi F, Keluo-Udeke SC, Gur-Arie R, Krubiner C, Jaffe EF, Bamiduro T, Karron R, Faden F. Conspiracy theories and misinformation about COVID-19 in Nigeria: implications for vaccine demand generation communications. Vaccine. 2022 https://doi.org/10.1016/j.vaccine.2022.02.005

TM-COVAC: is a before-and-after study that aims to use the **human-centered design (HCD) approaches to co-design and co-disseminate targeted messages** to improve the COVID-19 vaccine uptake among hesitant HCWs and adults. The study is set in all 10 wards in Gwagwalada Area council of FCT, Nigeria.



Baseline measurement March – April 2022	Identify April 2022	Co-design May – June 2022	Co-disseminate July-October 2022	Endline measurement Nov - Dec 2022
Qualitative interviews	Identified vaccine hesitant groups for targeted messages	Co-designed communication strategies and messages with hesitant groups and trusted messengers using HCD	Team sends targeted SMS Trusted messengers disseminate messages in community forums	Qualitative interviews
Household survey	Identified and engaged trusted messengers	Agreed on schedule of messaging activities by trusted messengers	Real-time, monitoring and learning on activities with TMs via WhatsApp SMS pulse survey to track vaccination uptake	Household surveys

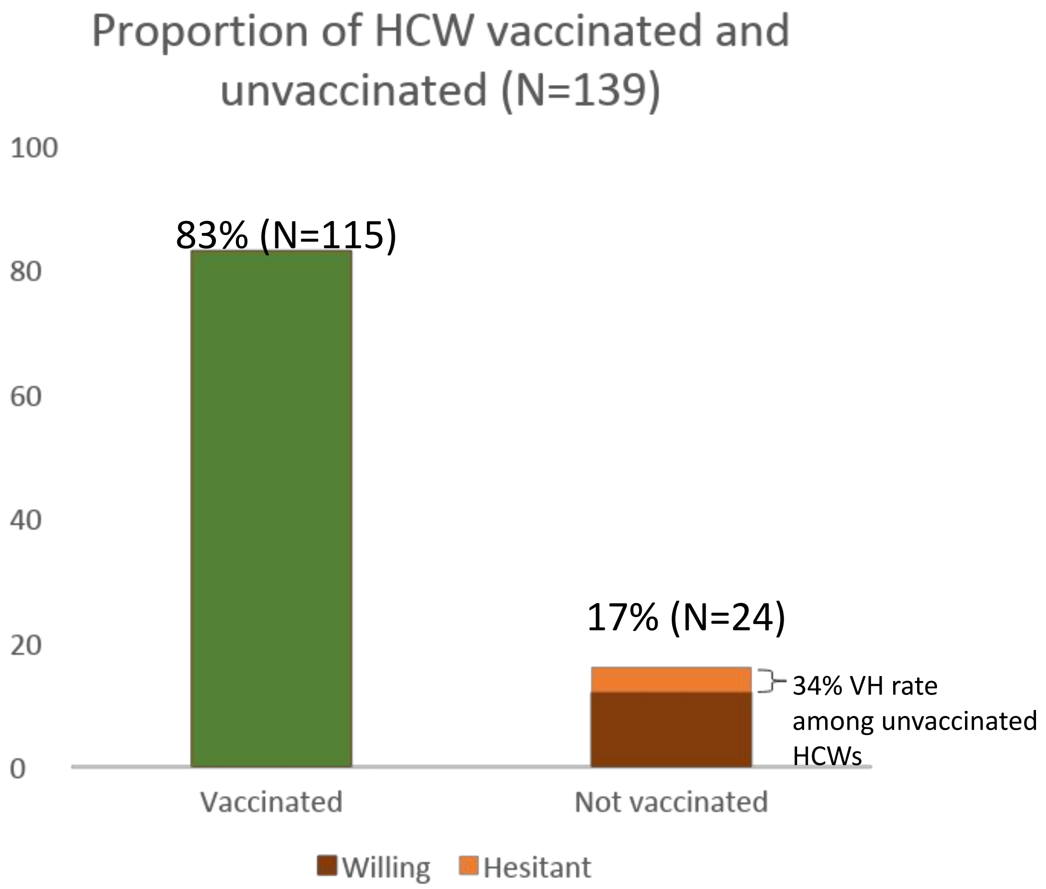

FGD with HCWs in primary health facility (rural area), March 21, 2022

Mixed-methods. Measurements ground on the **behavioral and social drivers (BeSD) framework**

- **Household surveys** of 1,515 eligible adults 18years and above using a two-stage sampling approach
- **Survey of 139 HCWs** selected convenience sampling
- **Qualitative interviews** with 74 purposively selected HCWs, eligible adults, community leaders and program managers at all levels. KII(1), FGDs (8), and IDIs (13)
- **Framework analysis** approach for qualitative interviews and **descriptive, bivariate and multivariate analysis of survey** using R analysis software

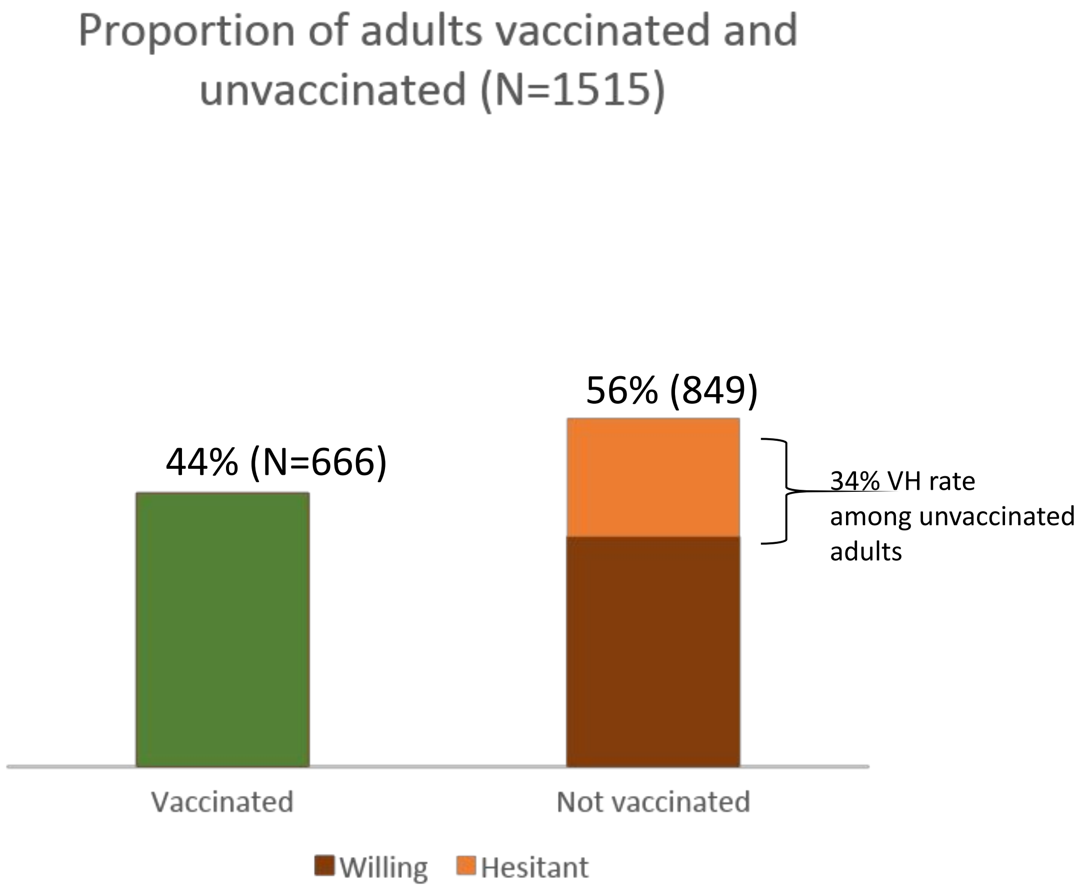
Baseline survey results

Overall vaccination rate was higher in HCWs compared to the adults, however, among the unvaccinated HCWs and adults, vaccine hesitancy (VH) rate was similar at 34%


Proportion of HCW vaccinated and unvaccinated (N=139)

34% VH rate among unvaccinated HCWs

Of the 24 unvaccinated HCWs, 34% were hesitant or unsure (VH). Overall hesitancy/undecided rate among sample of HCW was 5%


Proportion of adults vaccinated and unvaccinated (N=1515)

34% VH rate among unvaccinated adults

Of the 849 unvaccinated adults, 34% were hesitant or unsure (VH). Overall hesitancy/undecided rate among adult sample was ~19%

Baseline survey results

COVID vaccination rate (%) among HCWs by key demographic characteristics

Variable	Vaccine hesitant n = 24 (17%)	Vaccine acceptance n = 115 (83%)	Total n = 139	P value
Gender				
Female	14 (58%)	73 (63%)	87 (63%)	0.474
Male	10 (42%)	42 (37%)	52 (37%)	
Age (years)				
18-29	8 (33%)	28 (24%)	36 (26%)	0.240
30-49	15 (63%)	79 (69%)	94 (68%)	
50+	1(4%)	8 (7%)	9 (6%)	
Religion				
Christian	20 (83%)	53 (46%)	73 (53%)	0.022
Muslim	4 (17%)	62 (54%)	66 (47%)	
Health facility type				
Primary	15 (62%)	96 (83%)	111 (79%)	0.032
Secondary	9 (38%)	14 (12%)	23 (17%)	
Tertiary	0 (0%)	5 (4%)	5 (4%)	

Major reasons were concerns about the **vaccine's safety (31%)** and **side effects (28%)**, and other.

COVID vaccination rate (%) among adults by key demographic characteristics

36	Female	54	Male
38	18-29 years	45	>=50 years
42	No education	70	Postgraduate
44	Private sector worker	71	Government worker
31	Christian	50	Muslim

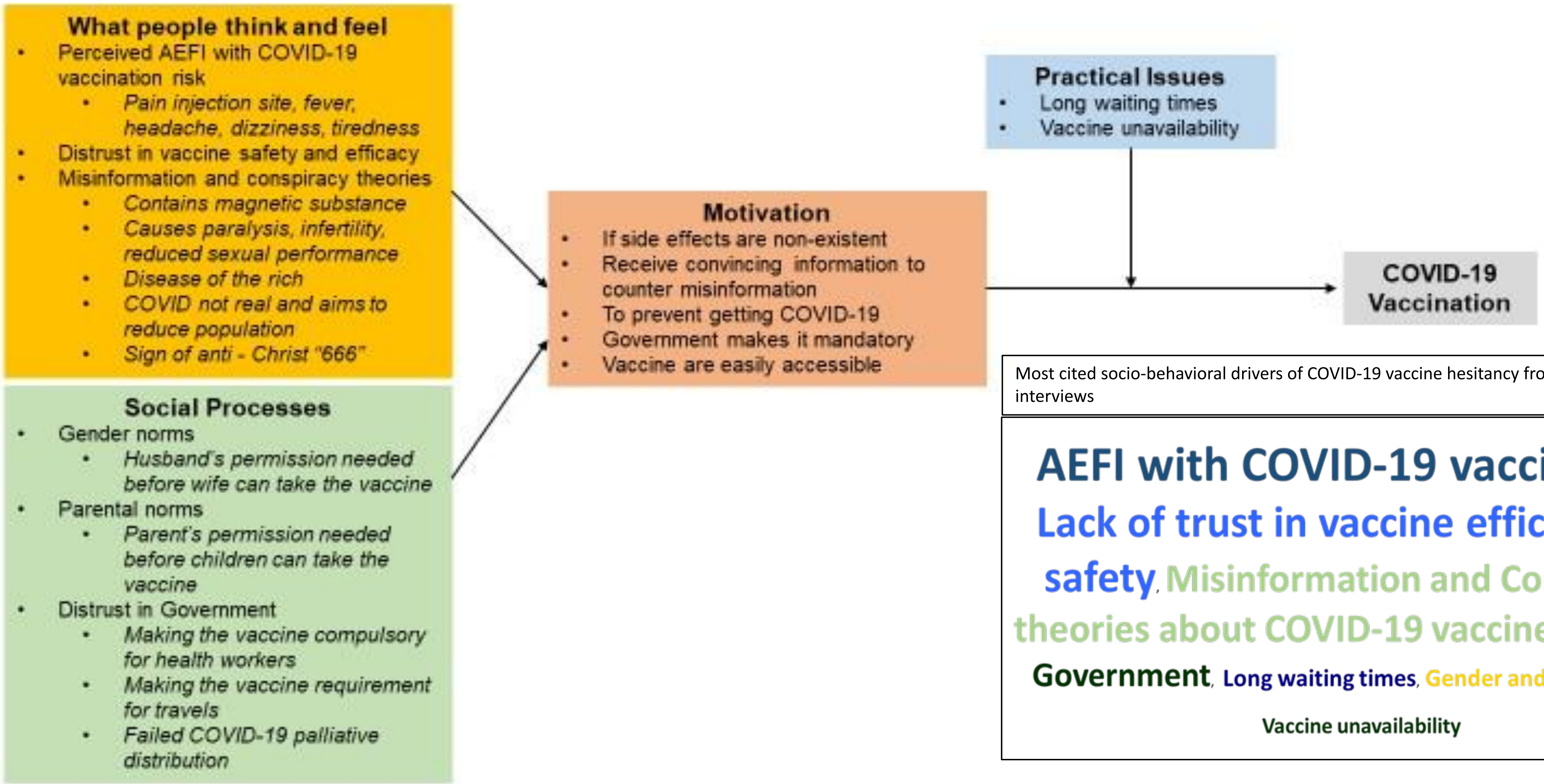
Major reasons for vaccine hesitancy were:

- practical issues- **lack of knowledge on where to get vaccinated (49%), vaccine not offered yet (44%), vaccine unavailability (31%), inability to access vaccines (27%), far vaccination site (14%);**
- Thoughts and feeling issues- **concerns about COVID-19 vaccine safety (31%), side effects (29%), and efficacy (28%)**; and
- Social processes issues- **distrust in government (11%)**.

Multiple responses were allowed

Baseline qualitative results

Qualitative interview findings



What people think and feel
- Perceived AEFI with COVID-19 vaccination risk
  - *Pain injection site, fever, headache, dizziness, tiredness*
- Distrust in vaccine safety and efficacy
- Misinformation and conspiracy theories
  - *Contains magnetic substance*
  - *Causes paralysis, infertility, reduced sexual performance*
  - *Disease of the rich*
  - *COVID not real and aims to reduce population*
  - *Sign of anti - Christ "666"*

Social Processes
- Gender norms
  - *Husband's permission needed before wife can take the vaccine*
- Parental norms
  - *Parent's permission needed before children can take the vaccine*
- Distrust in Government
  - *Making the vaccine compulsory for health workers*
  - *Making the vaccine requirement for travels*
  - *Failed COVID-19 palliative distribution*

Motivation
- If side effects are non-existent
- Receive convincing information to counter misinformation
- To prevent getting COVID-19
- Government makes it mandatory
- Vaccine are easily accessible

Practical Issues
- Long waiting times
- Vaccine unavailability

COVID-19 Vaccination

Most cited socio-behavioral drivers of COVID-19 vaccine hesitancy from the qualitative interviews

AEFI with COVID-19 vaccination, **Lack of trust in vaccine efficacy and safety**, **Misinformation and Conspiracy theories about COVID-19 vaccine**, **Distrust in Government**, **Long waiting times**, **Gender and family norms**, **Vaccine unavailability**

Key Learnings

- **Involving trusted community members and vaccine hesitant eligible adults was feasible** in developing a repository of evidence-based targeted messages and communication strategies to address COVID-19 vaccine hesitancy
- **Leveraging existing community structures and platforms to co-develop and co-disseminate targeted messages is essential** for sustainability
- A **bottom-up approach and involvement of trusted community members in diagnosing and solving their issues themselves** is highly encouraged, and engenders community participation and ownership
- **Involving program managers in the HCD process also built their skills** on how to use an HCD approach to design context-specific solutions to improve community acceptance of interventions including vaccinations
- **Recruiting vaccine hesitant HCWs was challenging** due to fear of losing their jobs and stigmatization.

HCD co-creation session and message testing with trusted COVID-19 vaccine messengers, May 25, 2022

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MINISTRY OF HEALTH-ETHIOPIA

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THANK YOU

WOMEN ADVOCATES FOR VACCINE ACCESS
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Direct Consulting & Logistics

CDC
Centers for Disease Control and Prevention

Collective service
Risk Communication and Community Engagement

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