

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



SIERRA  
LEONE  
URBAN  
RESEARCH  
CENTRE



# Gendered Experiences of COVID-19 Vaccination in Freetown

A Qualitative Study in Portee-Rokupa Community



FUNDED BY

**NIHR**

National Institute  
for Health Research



UK Research  
and Innovation

## ACKNOWLEDGEMENTS

---

The authors would like to thank all those who participated in the research and community leaders in Portee-Rokupa for their assistance. We thank Ansumana Konneh (formerly of NACOVERC) for critical insights and for highlighting the need for a gender analysis of COVID-19 vaccination. We are also grateful to Rose Burns and Anthony Mansaray for reviewing the document, and to the AViD Project Team.

## FUNDING

---

This study was conducted with support from a grant from the National Institutes of Health PR- OD-1017-20003 (AViD: Anthropological Exploration of Facilitators and Barriers to Vaccine Deployment and Administration During Disease Outbreaks). The views expressed in this publication are those of the authors and not necessarily those of the Department of Health and Social Care. Luisa Enria would like to acknowledge the support of a UK Research and Innovation (UKRI) Future Leaders Fellowship (Ref MR/T040521/1).

## RESEARCH TEAM

---

Abu Conteh,  
Braima Koroma,  
Christiana Priddy,  
Ibrahim Juldeh Sesay,  
Joseph Macarthy,  
Luisa Enria

## CITATION

---

This document can be cited as:

Conteh, A., Sesay, I.J, Macarthy, J., Koroma, B., Priddy, C., Enria, L. (2023). *Gendered Experiences of COVID-19 Vaccination in Freetown: A Qualitative Study in Portee-Rokupa Community*. London/Sierra Leone: LSHTM/SLURC.

## CORRESPONDENCE

---

Correspondence about this document can be sent to Luisa Enria ([Luisa.Enria2@lshtm.ac.uk](mailto:Luisa.Enria2@lshtm.ac.uk)) at the London School of Hygiene & Tropical Medicine, 15–17 Tavistock Place, London WC1H 9SH.

## PARTNERS

---

The London School of Hygiene and Tropical Medicine (LSHTM) is renowned for its research, postgraduate studies and continuing education in public and global health. The Sierra Leone Urban Research Centre (SLURC), based in Freetown, is a globally connected research centre created through a partnership between the Bartlett Development Planning Unit (University College London) and the Institute of Geography and Development Studies (Njala University). The centre aims to generate capacity building as well as research initiatives in cities across Sierra Leone focused on the well-being of residents of informal settlements. Its vision is an inclusive, socially and environmentally just urban Sierra Leone.



---

All photographs have been provided courtesy of the research team.

If you require this document in an alternative format, please email: [Luisa.Enria2@lshtm.ac.uk](mailto:Luisa.Enria2@lshtm.ac.uk)

# Table of Contents

<b>TABLE OF CONTENTS</b>	<b>3</b>	3.4 COVID-19 deployment strategy	19
<b>1 INTRODUCTION</b>	<b>4</b>	3.4.1 Health worker motivation or supplies	19
1.1 Background	5	3.4.2 Cooling facility for vaccines	20
1.2 Overview	6	3.4.3 Convenience	20
<b>2 METHODOLOGY</b>	<b>9</b>	3.4.4 Healthcare Worker-Patient Relations	21
2.1 Research Approach	9	3.5 Communications pathways	22
2.2 Research Setting	9	3.5.1 The effects of rumours and social media on vaccine uptake	22
2.3 Study Design	10	<b>4 CONCLUSION</b>	<b>24</b>
2.3.1 In-depth interviews	10	4.1 Recommendations	24
2.3.2 Rapid Ethnography	10	<b>REFERENCES</b>	<b>25</b>
<b>3 FINDINGS</b>	<b>11</b>		
3.1 Contextual findings	12		
3.1.1 Patriarchy	12		
3.1.2 Right to sexual and reproductive health	13		
3.1.3 Women and girls' access to education	13		
3.2 Experiences of COVID-19 and healthcare access	14		
3.2.1 Fear of COVID-19 Infection	14		
3.2.2 Barriers to healthcare access	15		
3.3 Gendered experiences of COVID-19 vaccine rollout	16		
3.3.1 Reproductive Health Concerns	16		
3.3.2 Work and caring demand on women's time	17		
3.3.3 Personal Experiences with COVID-19 Vaccine	18		

# 1

# Introduction

The COVID-19 pandemic gave rise to an unprecedented effort to rapidly develop and deploy novel vaccines to halt the spread of the virus across the world. The experience of this pandemic has shown both the opportunities and the challenges associated with devising vaccine deployment strategies in the midst of an emergency.

Developing lessons from the COVID-19 pandemic is essential as countries across the world prepare for future infectious disease outbreaks. In the field of vaccination, it is particularly important to identify effective strategies to ensure that, especially during an emergency, vaccines reach all members of society. Whilst the COVID-19 pandemic has intensified discussions about vaccine confidence and access challenges are increasingly recognised as an equally important problem, the gender

dimensions of these challenges are less frequently addressed directly. In this report, we take COVID-19 vaccination in Freetown as a case study to explore the gendered dimensions of emergency vaccine deployment. We offer key considerations to ensure that gender, and particularly women's needs and experiences, are placed at the centre of future planning for vaccinations in the event of a future infectious disease outbreak.



SLURC researcher at Portee-Rokupa Wharf. Credit: SLURC.

## 1.1 BACKGROUND

Sierra Leone recorded its first case of COVID-19 on 31st March 2020, and it was the last country in the Mano River Union to record a case. This was a disappointment to the government because it wanted to maintain a zero-case status given previous experience with the high number of Ebola cases and deaths the country recorded in the 2014-2016 outbreak. However, unlike the Ebola outbreak, during which cases spread very fast into congested informal settlements in Freetown, the spread of COVID-19 has been much slower. As of January 2023, the total number of recorded COVID-19 cases was 7,753, according to the Ministry of Health's COVID-19 dashboard.<sup>1</sup> In order to prevent the rapid spread of the virus into communities, a series of measures were undertaken by the government of Sierra Leone. These measures included the mandatory use of face masks, inter-district travel restrictions, two nationwide lockdowns in April and May 2020 respectively. The lockdowns lasted for three days each while the district lockdowns also lasted for two weeks. The restrictions from the government also included the suspension of international flights in March 2020 which lasted until July 2020. The government's swift response was following the experiences and response infrastructure developed during the 2014-16 Ebola outbreak. The novelty of the Ebola virus in West Africa and the inadequate infectious disease response infrastructure caused nearly 4,000 deaths in the country.<sup>2,3</sup> This experience of high death rates from Ebola, the enhanced capacity of healthcare workers and the existence of a robust epidemic preparedness and response infrastructure prompted the government's swift response to prevent the spread of COVID-19 into communities.

However, the government's response to roll out COVID-19 vaccination was less swift. This was partly because the country relied on High Income Countries and development partners to support the vaccination of eligible populations. As has been widely critiqued, the hoarding of vaccines by countries in the Global North meant that supply was slow to arrive in countries like Sierra Leone.<sup>4</sup> Even when vaccines arrived, there were significant deployment issues (including vaccines

arriving very close to expiration date). The first and second batches of vaccines amounting to 192,000 doses were donated on 8th March and 8th August respectively, a year after the country had its first COVID-19 positive case.<sup>5</sup> The vaccines were made available through the support of the COVAX facility.<sup>i</sup>

Globally, health inequality has been one of the biggest challenges affecting the deployment and access to vaccines in Low- and Middle-Income Countries (LMICs). In November 2021, a report by the NGO CARE stated that HICs had received 79% of vaccines, while only 4.5% were accessible by LMICs (Care International, 2021). A further set of challenges relates to unequal access amongst marginalised groups within countries once vaccines do arrive. An example of such a challenge to vaccine equity is gender inequality influenced by structural barriers and socio-cultural factors. There have been consistent critiques, emboldened by the experience of COVID-19, that highlight the limitations of looking at vaccine hesitancy as an individual issue or as a knowledge-deficit problem.<sup>7</sup> Instead, social scientists propose approaches to understanding vaccine confidence that are much more holistic, bringing together historical and political dimensions of mistrust and considering how health system structures, day to day experiences of healthcare



Queue by community water tank. Credit: SLURC.

i. The COVAX facility is an initiative supported by the World Health Organisation (WHO), UNICEF, GAVI and the Coalition for Epidemic Preparedness Innovations (CEPI) to increase vaccine access particularly in low-income countries.

and the set-up of vaccine deployment efforts may influence trust in vaccination.<sup>8</sup> Secondly, COVID-19 has not only highlighted but exacerbated gender disparities in health and heightened calls for systematically applying an “intersectional gender lens” to pandemic response approaches.<sup>9</sup> This includes enhancing a gender lens when developing vaccine deployment strategies, as “gendered factors related to vaccination programmes... may influence vaccine acceptance, access and uptake, further worsening inequities”.<sup>10</sup> As noted by a WHO Background Paper on gender considerations for equitable research, development, and delivery of COVID-19 vaccines:

**Failure to address gender-related vaccine hesitancy, confidence, acceptability, and access will be detrimental to the success of any COVID-19 vaccine. Data on acceptability and uptake of vaccines among adults by sex and other indicators are limited; but these data must be collected and considered in the context of COVID-19 vaccination programmes.<sup>10</sup>**

Indeed, producing rich evidence on women’s engagement with vaccination can help overcome persistent neglect of women’s experiences during health emergencies, which often compromises the effectiveness of epidemic response measures.<sup>11</sup> There are emerging reports from many LMIC settings that COVID-19 vaccine uptake patterns are gendered. Women make up 70% of the global health workforce and are more at risk of COVID-19 in many settings.<sup>6</sup> However, women are less likely to be vaccinated and this may be due to a range of factors—from challenges in leaving the home for vaccination, registering and accessing vaccination services generally, to accessing information on where to get a vaccine, and lower levels of trust vaccines.<sup>6</sup>

In Sierra Leone, existing gender norms and patriarchal structures continue to impact on women’s access to healthcare particularly in marginalised urban settings. These social and health inequalities are worse in informal settlements in Freetown where health accountability remains a challenge, and continues to affect access to

healthcare.<sup>12</sup> Moreover, limited opportunities to formal education, differences in income and household power dynamics impacts women’s ability to make healthcare decisions and the kind of information they have access to. Gendered social and health asymmetries in informal settlements may have also impacted on how women access the COVID-19 vaccine. On a national scale, WHO reports that gender differences exist for COVID-19 vaccine uptake. For example, as of February 2022, over 53% of those who had received at least one dose of the COVID-19 vaccine were men against approximately 47% of women.<sup>13</sup> As of January 2023, out of a target population of 4 million, 747,000 have been vaccinated with at least one done and 385,000 have received the last done of their primary series.<sup>13</sup> To strengthen ongoing and future vaccination efforts it is therefore essential to understand people’s experiences and perceptions of vaccination during a pandemic and to explore how these may be gendered.

## 1.2 OVERVIEW

In this report, we discuss findings from a study that applied a gender lens to explore the experience of emergency vaccination in Freetown, Sierra Leone. A rapid ethnographic study was done at Portee-Rokupa, a coastal informal settlement in the east of Freetown in February and March 2022. The study was designed to support current and future emergency vaccine deployment strategies in Sierra Leone. The study was prepared in response to conversations with colleagues from the National COVID-19 Emergency Response Centre (NACOVERC), who were concerned about the gender differences in the vaccination uptake data, particularly at the beginning of the rollout phase. The findings from this report are also aimed at supporting the Ministry of Health and Sanitation with future vaccine planning and deployment strategies. The aim of this research, therefore, was to understand gendered experiences and perceptions of vaccination, and factors driving potential disparities in confidence and uptake, to develop lessons for ongoing and future efforts at vaccine deployment, including the deployment of novel vaccines during an emergency. To do this, the research project focused on women’s experiences with and perceptions of COVID-19 vaccination, bringing together confidence and access questions through qualitative research in Freetown, Sierra Leone.

## Summary of Key Findings

### Context Matters!

- Patriarchal norms influence decision-making about women's health as well as their ability to access vaccination
- Reproductive concerns in the context of patriarchal norms and expectations of women to bear children affected women's concerns about taking the COVID-19 vaccine. Access to the vaccine was also curtailed by domestic responsibilities and informal livelihood commitments
- Prior experiences of poor access to health or negative experiences of interactions with healthcare workers affect trust in the vaccination process
- Fear of the pandemic and concerns about its veracity affected people's experiences of vaccination

### Experiences of Vaccination and Perspectives on Vaccines

- Fear, experiences of side effects and hopes for good health placed in the vaccines shaped willingness to take the vaccine and/or a second dose. For women, concerns about the impact of the vaccine on fertility played a significant role.
- Men's higher involvement in formal employment meant they had more incentives to take the vaccine given mandates for vaccination cards in public offices
- Engagement by trusted local stakeholders and known health workers helped to build trust, including public vaccination of health workers
- Social media played a role particularly amongst young people but it was also a source of rumours and anxieties that were best addressed through localised engagement
- People in informal settlements faced bigger challenges in accessing the health centre, having vaccines available when they visited or in being reached by mobile clinics

### Supply-Side Issues

- An under-resourced health system struggles to respond to emergency vaccination and this further undermines confidence in the process
- Adaptations such as mobile clinics made important in-roads into addressing access challenges for women in informal settlements
- Storage challenges at local healthcare facilities impacted on waiting time and access to vaccines
- Motivation of healthcare workers was sometimes low as a result of delayed incentives and interrupted electricity supply

### Summary of Recommendations

- The development of vaccine deployment strategies must include detailed contextual and intersectional gender analysis, paying particular attention to how gender norms and gendered livelihoods might influence vaccine confidence and uptake
- Women's and men's experiences of vaccination and their ability to make decisions about taking a vaccine are not the same. Deployment strategies must take into account women's domestic responsibilities and community engagement must be differentiated to directly address women's concerns and elicit dialogue with women's groups.

- Trusted sources of information and mobilisation must be mapped within each community and differences along gender, socio-economic and other salient lines identified.
- Women’s decision making can be constrained by societal norms. Vaccination strategies must therefore seek collaborations with gender transformative programmes to consider how adult immunisation can be aligned to ongoing effort to empower women.
- The design of vaccine messages must integrate local knowledge and experiences into planning to address concerns and increase dialogue about the benefits of vaccine uptake
- Vaccine deployment must follow an integrated approach. This includes considering how emergency vaccines can be best delivered alongside other routine services, improving cold chain and storage facilities and how health workforce motivation can be sustained. It also means that long-term health-system strengthening is required to deal with structural challenges as well as short-term logistical solutions.
- Communities and particularly women’s groups should be actively involved in advising vaccine deployment strategies right from the start to facilitate the development of adaptive strategies such as the mobile clinics
- Trusted community stakeholders must be identified in a diversified way so as to reach different groups. Finding community leaders and channels that are appropriate to reach women in different communities, and building on existing relationships is paramount.



Covid vaccines in freezer. Credit: Luisa Enria.

# 2

# Methodology

## 2.1 RESEARCH APPROACH

The research explored women's experiences with and perceptions of COVID-19 vaccination from a variety of different angles, observing both confidence and access questions and describing the physical, social and institutional infrastructure around COVID-19 vaccination. This included questions around:

- Gendered factors influencing access—e.g., distance to & accessibility of vaccination mobile/static clinics, household decision-making dynamics, work/caring labour's demands on women's time
- Experiences of healthcare (including reproductive health) which may affect trust in vaccines and vaccinators
- Perceptions of vaccines: exploring gendered dimensions of vaccine confidence—including women's perspectives of COVID-19 vaccines (and vaccines in general), and how particular experiences (e.g., pregnancy or concerns about reproductive health) may affect vaccine uptake.
- Communication and engagement pathways: types and channels of information around COVID-19 vaccination and pathways to reach women in particular; relationship between current messaging and women's lived experience, gendered dimensions of formal and informal authority and trust
- Institutional set up: effects on confidence/access of organisation of COVID-19 vaccination campaign in each location (e.g., establishment of mobile or static clinics; relationship between the District COVID-19 Emergency Response Centre (DICOVERC) and the District Health Management Team (DHMT); integration in broader Extended Programme on Immunisation (EPI) efforts or other emergency

vaccination campaigns; gendered effects of vaccination/pandemic regulations

## 2.2 RESEARCH SETTING

Our case study was conducted at the Portee-Rokupa neighbourhood. Portee-Rokupa is a coastline settlement adjacent to a formal neighbourhood located in the eastern part of Freetown, 10 km from the city centre. Established in the early 1940s, this community has developed to become one of the most populated communities in Freetown. River banking is very common in the community due to the lack of space and high poverty rate. Alongside poor housing conditions, it is a community that faces challenges with adequate social infrastructures like health, sanitation, and schools. Residents of Portee-Rokupa have been exposed to recurrent disasters and several health risks such as malaria, pneumonia, fever, and smallpox amongst others. Within this setting, health risks are coupled with unemployment and low literacy levels. The main source of earning livelihood for the community is petty trading with fishing. Over the years, the settlement has become one of the largest fishing communities along the coastline in the east end of Freetown, building an identity as a fishing community.

Informal settlements pose particular challenges during infectious disease outbreaks due to population density, inadequate access to water and sanitation facilities as well as often insufficient data due to informal status.<sup>14-17</sup> In these settings, logistical challenges for delivering vaccination are higher and citizens' relation to service providers and the state may be strained by experiences of socio-political exclusion.<sup>18</sup> Vaccines were introduced in Freetown after the country received the first donations in March 2021. However, there were concerns about overcoming logistical challenges to ensure people living

in informal settlements have equitable access. Moreover, the vaccines initially supplied were in limited quantities, so supplies were rationed across health centres in Freetown. As a result of the longstanding exclusion of informal residents from healthcare prioritisation, people in these settlements were less likely to be serviced. We therefore chose Portee-Rokupa because we wanted to further understand these social dynamics and how they impact on vaccine equity. The research team also had long-standing relations of trust in the community and had previously carried out a quantitative survey on vaccine confidence in the first months of roll-out in April 2021.<sup>19</sup> We wanted to build on the findings of the survey which had looked into vaccine confidence, drawing from community experiences of the public health response to the outbreak and its social and economic impacts. The survey had shown that although overall willingness to vaccinate was high, women were slightly less likely than their male counterparts to state an intention to accept the COVID-19 vaccines. Low trust in government, hesitancy in relation to vaccines in general and lower levels of education were associated with lower intention to accept a vaccine if offered one. Worries about vaccine safety also played a role. The fishing community of Portee-Rokupa allowed us to explore these factors in depth and to focus in particular on the gender dynamics of vaccine uptake and access in the context of an urban settlement.

## 2.3 STUDY DESIGN

This research was mainly qualitative and was led by Principal Investigators from SLURC and LSHTM. Data collection was jointly done by community researchers and researchers from SLURC. Two community researchers were embedded in the Portee-Rokupa neighbourhood and had been previously trained in research methods by SLURC. They received additional training specific to the research aim and tools, and were supported in the field by two SLURC Research Officers, with supervision from the Health Research expert from SLURC. The following research methods were used to collect data:

### 2.3.1 In-depth interviews

We conducted 70 in-depth interviews to explore our key questions regarding gender differences in

COVID-19 vaccination. To understand the dynamics underpinning the gendered dimensions of vaccination, we interviewed women participants as well as male partners, community leaders and healthcare workers. We interviewed participants both in the informal and formal sections of the community, although in the report we focus primarily on the experiences of residents of the informal section of the neighbourhood. Respondents were identified by community researchers to achieve a spread of characteristics (e.g., age, education, and occupation). An “entry” meeting with the community, and with specific groups (e.g., market women leaders and Harbour Masters) allowed the research team to present the research plans and allowed individuals to volunteer for the study. A breakdown of respondents is highlighted below:

- **34 women (aiming for an even spread of ages above 18 and a mix of education and occupation)**
- **24 men/partners (aiming for an even spread of ages above 18 and a mix of education and occupation)**
- **6 community leaders/Stakeholders (Community chiefs, women’s right advocates and women’s leaders)**
- **6 Healthcare workers working in the community**

### 2.3.2 Rapid Ethnography

We made active observations of daily events within the communities alongside the interviews we conducted. These observations included livelihood activities, health seeking actions, interactions between men and women and power relationships. Researchers were encouraged to keep ethnographic notes of their observations of these daily life events in the Portee-Rokupa community, to contextualise the interview data they collected. Researchers spent time at the nearest vaccination clinics (or observing “surge”<sup>ii</sup> events happening over the period of research) to observe vaccination exercises. Informal discussions with women at markets or in households and congregation areas also formed part of the observations. Observations were also made outside Antenatal Care and routine vaccination clinics where women and children visited. The researchers were encouraged to keep notes on specific rumours and concerns relating to vaccination in the neighbourhoods.

ii. Surge vaccination refers to periods of intensive outreach to vaccinate for COVID-19 organised by the Ministry of Health & Sanitation across the country.

# 3

# Findings

In this section, we anchor our findings on broader community dynamics including gender relations and social factors influencing vaccine and healthcare access. These factors include access to education, livelihood, and household responsibilities.

We link these contextual findings to other findings under four themes:

- i. **Experiences of COVID-19 and healthcare access**
- ii. **Gendered experiences of the COVID-19 vaccine rollout**
- iii. **COVID-19 vaccine deployment strategy and**
- iv. **Communications pathway.**

The findings under these themes describe how social and structural factors such as patriarchy and barriers to health information impact on women’s participation in household and healthcare decision making. We also describe community and personal experiences of COVID-19 measures and how these link to trust in the health system and the COVID-19 vaccines. Finally, our findings highlight logistical and management challenges affecting access to COVID-19 vaccines, coupled with barriers to health information. We start by first describing these contextual factors and then move on to describe the vaccine and COVID-19 experiences.



Poster in a health clinic depicting a religious leader being vaccinated. Poster reads: "I have taken my Covid-19 vaccine. You should go and take yours to protect you and your family. The vaccine is safe, free and effective. Credit: Luisa Enria.

## 3.1 CONTEXTUAL FINDINGS

Attitudes to and experiences of vaccination do not happen in a vacuum. Understanding the context in which people make decisions about vaccination and the factors that determine access and confidence in vaccination is key. Indeed, research has shown that often (mis)trust in vaccination has little to do with the vaccine itself and much more to do with people's social experiences and prior interactions with the health system. In this section, we contextualise women's decision-making to show the role of patriarchal structures on women's ability to make decisions about their health. We focus here in particular on examples on the relationship between patriarchal norms and decision-making around reproductive health and education as these have direct implications for women's engagement with vaccination.

### 3.1.1 Patriarchy

Social and structural factors shaping community life in Portee-Rokupa are linked to patriarchy, that is, a social system of male dominance that is further reinforced by religious and cultural norms as well as economic structures. As part of the dominant social structures, these institutions inform social interactions and participation in decision making about marriage, childbearing, and health seeking. Understanding the nature of patriarchal dynamics in Portee-Rokupa elucidates the context in which women make decisions about their health. These social structural factors shape women's decisions about health seeking, and trust in the health system.



Women waiting for fishing boats at Portee-Rokupa wharf. Credit: SLURC.

Women's accounts of family life and decision making mostly reflected social norms reinforcing male dominance. For many women, male dominance is experienced a normative social practice that is often upheld by religious and cultural expectations and reinforced by social groups and relations. These normative gender constructions and expectations influence how decisions are made. This was shown for example in our respondents' stories about practices such as arranged marriage. This experience is described by an elderly woman living in Portee-Rokupa:

**“[...] I did not have courtship with my husband before we got married. My family forced me to marry him, and I abided by their instructions. Although he is not financially strong, we have been living peacefully. [...] He guides and strengthens me and my children to the right path, which is worth more than money, as prescribed by the Islamic religion [...].”**

(W\_INF\_O\_03)<sup>iii</sup>

Within the informal setting, patriarchy informs many aspects of life that affect women's rights to access services such as healthcare. Since the end of the war, there have been several interventions by NGOs and organisations focused on gender and women's rights to deconstruct negative gender norms to enhance gender justice and increase women's access to health and education. These efforts propose that increasing women and girls' access to education will empower them and improve their financial capabilities including enabling them to make more informed decisions about their health. However, inability to address the structural drivers of women's social, economic and political exclusion and a failure to engage with local knowledge and norms has hindered these efforts.<sup>20</sup> Continued barriers against women's empowerment including limited formal education can limit women's participation in decision making regarding where and how to seek healthcare. For example, women who lack formal education are often excluded from decision making platforms which limit their capacities to analyse health needs and priorities. As we discuss further below, many women stated that before taking the vaccine, they had to get the consent

iii. Interviews are anonymised and coded by gender of the respondent and location (FRM for the formal section of the settlement and INF for the informal).

of their husbands or partners first and limited access to information could reinforce mistrust in the health system. These factors have impacted on whether women take the COVID-19 vaccines.

### 3.1.2 Right to sexual and reproductive health

The influence of patriarchal norms of decision-making was especially evident in relation to reproductive health. In this domain, we can see how access to preventive health is often not an individual choice but the focus of societal scrutiny. The significance of women's reproductive role in society, as we shall see, has implications for how women's vaccination is seen and experienced.

Access to reproductive health in Sierra Leone can be controversial because of religious or cultural norms. Religious leaders and groups in Sierra Leone often deter women from using contraceptives. As religious affiliation and belief are strong in Sierra Leone, these directives come with significant social pressure. Some of our female respondents for example noted that contraceptives should not be used because they are not sanctioned by God:

**“I don't indulge myself in such activities because it is a sin against God. [...] The decision about when to have children is in the hands of the Almighty God, and neither I nor anyone can determine that.”**

(W\_INF\_Y\_01)

Whilst many women we spoke to did make use of contraceptives, they said that this depended on the approval of their husbands, and some stated that they were restricted from using them by their husbands or male partners. In explaining this, they pointed to the fact that their partners perceived contraceptives as a route to sexual promiscuity. Partners' efforts to prevent women from using contraceptives on these grounds led to frequent marital conflicts. In some instances, this meant that women conceal the use of contraceptives from their husbands or partners to avoid confrontation:

**“Family planning is not too recognized in this community. Some women take it under high secrecy from their husbands, because they normally misunderstand taking contraceptives for promiscuous intentions by their wives [...]”**

(W\_INF\_Y\_06)

Disagreement about the use of contraceptives also had to do with different perspectives between partners about the number of children a couple should have. Women's motivation for using contraceptives for example was to limit the number of children to reduce the financial burden related to childcare. Whilst men were seen to have different expectations. As one woman expressed: **“some men would want to have many children leaving the burden on the women”**. These tensions and conflicts point to power differentials that can determine women's ability to make decisions about their own health. As we discuss below, these also translate into their ability to make decisions about vaccination.

Social norms around family planning and expectations of women's childbearing not only give us an insight into access to and decision-making for preventative services, but they also directly influence the concerns discussed below around how vaccination might impact fertility.

### 3.1.3 Women and girls' access to education

We explored women's access to education to understand its relationships with healthcare access. As highlighted earlier, there is a link between women's access to education and information about health seeking and studies indicate that limited access to education can impact health risks and mortality.<sup>21</sup> Within the Portee-Rokupa community, many women missed out on the opportunity to receive formal education. For example, we were told that teenage pregnancy was high in the community and that many of the teenage mothers were already out of school and often forced into arranged marriages. In Sierra Leone, around 34% of women between the ages of 20 and 49 had their first child before age 18.<sup>22</sup> In 2015 the government of Sierra Leone placed a ban on pregnant girls from attending school. This decision stemmed from the increased number of pregnancies among schoolgirls when schools were shut down because of the Ebola outbreak.<sup>23</sup> This ban was in place until it was overturned in 2019 by a court order

from the Economic Community of West African States (ECOWAS) Court of Justice, which ruled that the policy was discriminatory.<sup>24</sup>

In Portee-Rokupa, respondents often blamed girls and their families, connecting teenage pregnancy to poverty as described by this young woman living in the community:

**“A good number of women in this community do not plan when to have children because I see a lot of pregnant women, and most of them are teenagers who are not going to school, and their parents cannot take good care of them. Once they have boyfriends who are providing them with some basic needs, they end up getting pregnant.”**

(W\_INF\_Y\_10)

Teenage pregnancy and broader challenges to women’s access to education are important backdrop for understanding women’s marginalisation and how it may impact their ability to make decisions about their health including about vaccination.

## 3.2 EXPERIENCES OF COVID-19 AND HEALTHCARE ACCESS

### 3.2.1 Fear of COVID-19 Infection

Vaccinating during a health emergency is different from other kinds of vaccination campaigns. This is because the anxieties generated by the epidemic itself and the socio-economic consequences that epidemics give rise to. Fear about the COVID-19 pandemic impacted people’s healthcare access and vaccine uptake.

Some women feared that they would be deliberately infected by nurses if they visited the health centre. Others were concerned about receiving the right attention and care since nurses were themselves afraid of contracting the virus from patients and some reported experiences of being abandoned by nurses. Similarly, rumours about the origin of the virus also caused doubts about the disease and was seen to impact willingness to access formal

healthcare as people were concerned about visiting health centres. One woman for example pointed to a rumour that health workers were deliberately infecting their patients to show that the virus was real. Another young woman summarised the challenge this way:

**“I noticed that the number of patients at the health centres drastically reduced which I think is because people fear getting the virus. Many people believe that you may be looking very healthy, but once you go to the health centre, the doctors or nurses will inject you with the virus just so that people will believe that the virus is real. This has left people with no choice but to resort to self-medication or seeking care from drug peddlers, and traditional healers.”**

(W\_INF\_Y\_05)

Other rumours cited by our respondents included the belief that the virus was man-made or that it was a bioweapon created by the government of Sierra Leone to make money at the detriment of the public. This was reminiscent of rumours circulating during the country’s Ebola outbreak. A male participant made this link explicitly:

**“COVID-19 is among the most denied viruses that ever emerged in our country; similar to Ebola, people blame it on the government for wanting to make money at the expense of the people of our nation.”**

(M\_INF\_O\_03)

During the Ebola epidemic, social scientists pointed to the importance of understanding rumours as an expression of anxiety and mistrust in an emergency, rather than simple misinformation.<sup>25,26</sup> Rumours that implicate nefarious government interests for example may be best understood in the context of political marginalisation and histories of exclusion.

Another important dimension of mistrust around COVID-19 was that it did not only affect trust in the formal health system, but it was believed to have increased self-medication at the height of the outbreak.

In Portee-Rokupa, respondents reported that many who had a fever had abstained from seeking care from the community health centre because they did not want their conditions to be linked to COVID-19. The fear of being quarantined was another key concern driving fear of a COVID-19 diagnosis.

The use of social media contributed to the spread of fears about COVID-19 which also affected healthcare utilisation. Participants stated that video and audio contents relaying negative information about the pandemic and fuelling rumours were widely distributed. This was believed to have contributed to the irregular use of healthcare services. These dynamics are discussed in detail under the section dealing with communications.



Poster hanging in health facility reads: Corona is real, wash your hands frequently with soap and clean water for at least 20 seconds and avoid touching your eyes, nose and mouth! For emergency call 117. Credit: Luisa Enria.

### 3.2.2 Barriers to healthcare access

Research on vaccine confidence highlights that broader experiences with the health system and interactions with health-care workers beyond the vaccine encounter, ranging from perception of being poorly treated, having to pay high prices for treatment or being unable to access healthcare, have a significant impact on willingness to be vaccinated.<sup>7</sup>

In this study, in addition to the COVID-19 induced fears, participants stated that access to healthcare was affected by pre-existing social and healthcare access barriers. Major barriers to accessing health services included distance to the health centre and financial challenges. The flatlands above the Portee-Rokupa wharf are considered as the start of the formal neighbourhood and differences were drawn between this area and the informal settlement below. Women in the formal neighbourhood had relatively easy access to healthcare whilst women living in the informal settlement around the wharf were concerned about distance to access the community health centre. They reported that a health centre had been constructed by an NGO but was still not functional. Therefore, people living in this area have to contend with climbing steep slopes to access the only functional government supported health facility (ISCON) in the formal neighbourhood. One woman living in the area around the wharf explained:

**“Our greatest worry is the lack of an operational health centre. When someone falls sick, we either take the person to the ISCON Health Centre or the Rokupa Government hospital which is outside the community; We face these barriers apart from the other difficulties in accessing these health facilities.”**

(W\_INF\_O\_04)

Out of pocket payment was also a crucial factor affecting access to healthcare. Women linked their concerns about healthcare access to their inability to pay for healthcare services, particularly when in dire need of care. Participants stated that access to healthcare was also affected by the limited supply of drugs by the government. For some women, this meant avoiding the health centre, opting for other strategies such as the purchase of medicines from nearby pharmacies and drug peddlers:

**“Well, it has taken me a long time without visiting the health centre; I have no money. I mostly buy drugs from drug peddlers who do come around to sell drugs.”**

(W\_INF\_O\_02)

Healthcare access for children was also a key concern. Although healthcare for children under 5 has been free since 2010 under the Free Healthcare Initiative, challenges such as unavailability of drugs and unsalaried health workers have hindered the Initiative's success. One elderly woman cited a few instances when children had died in the community because their parents could not afford the cost of care:

**“When the need arises for you to access a healthcare facility, then you will realise how difficult it is to be in such a situation. Many children die in this community because their parents cannot afford the prohibitive cost of healthcare. The least amount of money they demand is around NLE 100 which many of us cannot afford.”**

(W\_INF\_O\_04)

Male participants also reported similar experiences of limited access to healthcare – also pointing to the poor state of infrastructure, distance and their experiences of being poorly treated by healthcare providers, which undermined their willingness to go to the centre. Moreover, seeking healthcare elsewhere outside of the community comes with increased financial costs.

These healthcare access challenges affected trust between healthcare providers and patients, something that was only exacerbated by the COVID pandemic. A woman from the formal part of the neighbourhood for example relayed her distressing experience:

**“I was going to the hospital at that time because I was pregnant and the experience was awful; a lot of nurses refused to touch me because they fear that I have covid, and if any of them is to take that risk, they will use gloves to do so. It was a moment when nobody trusted another person.”**

(W\_FRM\_Y\_01)



Pull-up roller banner from the Ministry of Health promoting the COVID-19 vaccine. Credit: Luisa Enria.

## 3.3 GENDERED EXPERIENCES OF COVID-19 VACCINE ROLLOUT

We found that the gendered factors influencing COVID-19 vaccination were shaped by people's individual experiences with the vaccine, and other social factors. In particular, we show how earlier contextual findings connected to women's access to education, and power differences between men and women influenced women's experiences with and perceptions of COVID-19 vaccination. These factors impact on the right of women to make decisions about accessing healthcare. Below, we describe how these gender and social factors influence the decision of women to take the COVID-19 vaccine. We look at these factors under the following areas:

### 3.3.1 Reproductive Health Concerns

As discussed above, women's reproductive choices must be understood in the context of patriarchal norms and expectations and in relation to the role that male partners and other social influences play. Women's fertility bears strong social and cultural relevance, not least because it is seen as central to social reproduction and as providing safety nets for parents in the absence of state support.

Against the backdrop of the social pressure and cultural significance of childbearing, a key finding was that people had strong concerns about their reproductive health and this impacted women's participation in the COVID-19 vaccination. Women who voiced this concern believed that the vaccine could have a negative effect on their fertility if they took it. Young women were more likely to hold these concerns, particularly those who had not yet had children:

**“Some women were afraid because they have not yet given birth so they were afraid that if you take the vaccine, you will no longer bear children, or your child will die if you take the vaccine.”**

(W\_FRM\_Y\_06)

Concerns about fertility were linked to the earlier contextual findings which describe the social and cultural relevance of childbearing in different settings in Sierra Leone. For this reason, women were afraid to take the vaccine, thinking of the broader societal consequences of childlessness. However, reproductive health concerns were not consistent for women across different age groups. For example, older women who had had children in the past were less concerned about the loss of fertility but were more worried about side effects. While some of these women were not keen on taking the vaccine, they expressed that they would have considered it if it were to reduce their fertility as one woman noted in Portee-Rokupa's informal settlement:

**“Although it is rumoured that taking the vaccine affects women's fertility, refusing to take it was not because I was afraid of losing my fertility; in fact, I would have taken the vaccine if it were to prevent me from giving birth. Already, I have children and I am not ready to have more babies anymore.”**

(W\_INF\_O\_03)

Whilst having many children is socially valued, for some this also comes with a significant financial burden.

When we referred these COVID-19 fertility concerns to health workers, they confirmed that they had observed

these fears among women of childbearing age during their vaccination efforts. One of the health workers said that fears about fertility are spread often by family and social networks, particularly those with health backgrounds. This, she said contributes to building anxieties about COVID-19 vaccine uptake:

**“We all know that a large number of the female population is in active reproduction and with the negative thoughts that the vaccine can harm their fertility, nearly all of them refrain from taking the vaccine. Women are either pregnant or are lactating mothers and with the thought that the vaccine can be harmful to themselves and their children, they avoid taking it.”**

(HCW\_INF\_01)

Concerns that vaccination might have implications for fertility are widespread and have been documented in other contexts and in relation to other vaccines.<sup>8,27</sup> However, it is also possible that vaccination not being recommended for pregnant women may have led to interpretations of a connection between the vaccine and harms to women's fertility.

### 3.3.2 Work and caring demand on women's time

Not only are women's health-seeking choices limited by norms and expectations, but their socio-economic position also influenced their ability to access vaccination. Whilst men were more likely to be in informal employment and to work outside of the community, women were often relegated to domestic responsibilities. Women cited household responsibilities such as childcare, cooking and laundry, combined with their livelihood activities as restricting their time to go and take the COVID-19 vaccine. This was even more of a concern to single mothers who provided for their children without any support:

**“I do fishing as an occupation [...]. My husband has abandoned me here with my kids, and I am alone here with my kids, things are really difficult here with us.”**

(W\_INF\_Y\_03)

In general, women living around the Portee wharf talked about focusing most of their time looking for fish to sell at the expense of other activities:

**“[...] The majority of women engage in the fish trade. So, they are always in the wharf to look out for fish. They have less time to spend at home, and when the vaccination teams come, the majority do not have the patience to wait for vaccination as they have to go all-out to meet the needs of their of their household members.”**

(W\_INF\_Y\_04)

Given this concern with time, it was not surprising that proximity to a health facility and the availability of mobile vaccination were cited as facilitators of vaccine uptake. Conversely, men’s higher levels of involvement in the formal economy meant that they were more likely to be in need of a vaccination card to enter public offices or to travel (including for example to neighbouring countries for trade), as this was made a requirement by the government during the pandemic.



Woman cooking outside in Portee-Rokupa. Credit: SLURC.

### 3.3.3 Personal Experiences with COVID-19 Vaccine

Experiences of COVID-19 vaccination, either personal or reported by people within one’s social network were frequently referred to as influencing decisions either to be vaccinated at all or to return for a second dose. In discussing vaccination, our female respondents overall reported limited side effects after taking the vaccine. Both young and older women reported minor to severe side effects including dizziness, vomiting, fever, and headaches for the first few days after the uptake. However, there were few women who reported having no side effects at all. An older woman for example contrasted her positive experience of vaccination with her initial fear:

**“Initially, I was afraid to take the vaccine, but I built up courage and finally decided to get vaccinated. I went to the hospital and had my shot. However, I did not experience any health problems after I took the vaccine. My experience with the vaccine is positive.”**

(W\_FRM\_O\_08)

Few women we spoke to who took the vaccine experienced major side effects but for those who did, it impacted their willingness to take the second dose. An older woman in Portee for example reported very severe experience with the vaccine after taking the first dose, and completely ruled out the chances of returning for a second:

**“I think my experience was unfortunate because I felt like I was going to die after taking the vaccine; it took me over a week to recover from that nightmare and to be honest with you, I won’t take the second dose anymore because I don’t want my first experience to repeat.”**

(W\_INF\_O\_04)

Amongst those who decided not to take the vaccine, some cited underlying health problems or fears that the vaccine might trigger further illness. One woman from the informal part of the community for example stated that she decided not to take the vaccine because of her health condition and her fear of both further complications and the financial

implications of exacerbating her condition and needing treatment:

**“I have not taken the vaccine because I am a low blood pressure patient, and it is not good for me to take it. I heard that anybody having underlying health problems must refrain from taking the COVID vaccine and so if I make such an attempt, I will be doing it at my own detriment.”**

*(W\_INF\_Y\_08)*

Overall, the men in our study described somewhat different experiences and consequently different attitudes to the COVID-19 vaccine. For male respondents for example, side effects were reported to only last for short periods, including mild dizziness, headaches and swelling of the arm. As compared to female respondents, men expressed higher motivation for vaccination. These included ambition for wellness and a perspective, less widespread amongst female respondents, that the vaccine might cure other illnesses. Two men expressed these perspectives:

**“At first, I had a regular fever but after taking the vaccine everything went well, and so I believe the vaccine will protect one from different sicknesses.”**

*(M\_FRM\_Y\_05)*

**“Well since I took the COVID-19 vaccine I experienced that there are certain things that happened to me in the past are no longer happening. I used to get sick with malaria and severe headache, but since I took the vaccine, I have not been feeling sick.”**

*(M\_INF\_Y\_07)*

Other studies have highlighted the curative hopes associated with vaccines, for example during the Ebola vaccine trials in Sierra Leone.<sup>28</sup>

Individual experiences of vaccination, as well as hopes and fears, influence willingness to take vaccination.

Community engagement strategies that focus solely on providing information may miss the more nuanced and experiential aspects of motivations to vaccinate. These respondents' perspectives point to the importance of dialogue and follow up on individual and collective experiences of vaccination.

## 3.4 COVID-19 DEPLOYMENT STRATEGY

Often studies of vaccine uptake focus solely on demand, however challenges in deployment of the vaccine may similarly impact confidence as well as access. Our study shows that some aspects of vaccine deployment were quite successful, such as efforts to provide outreach services through mobile vaccination clinics. However, these successes occurred against the backdrop of significant challenges, including some specific to the difficulty of operating in the context of Freetown's informal settlements. These challenges were influenced by logistical and management issues which affected access and had repercussions for vaccine confidence. We describe these constraints, focusing on the perspectives of health workers themselves, in the following sub-sections:

### 3.4.1 Health worker motivation or supplies

The concerns of health workers in providing COVID-19 vaccination were related to the payment of allowances, supply of vaccines and logistics, and the lack of a cooling facility. Health workers interviewed as part of this project explained that these concerns had sometimes demotivated them and their colleagues and delayed outreach activities. For example, they raised concerns about inadequate supplies of patient screening forms, which meant they had to use their own resources to reproduce the forms to keep the vaccination going. Some health workers also pointed to the limited number of personnel administering the COVID-19 vaccines. The overlaying of emergency vaccination surges on existing routine services without additional staff increased health workers workloads. Among the many challenges, delays in the payment of stipends was widely cited as causing demotivation and sporadic strike actions. One of the health workers summarised these concerns:

**“Lack of motivation such as stipend for healthcare workers by the government, lack of a constant supply of electricity, inadequate room space and beds for admission [...] these are part of the existing challenges.”**

(HCW\_F\_03)

### 3.4.2 Cooling facility for vaccines

Health workers described access and use of adequate cooling systems for vaccines as a significant challenge. They highlighted the lack of solar refrigerators to make up for the power outages as a crucial factor that affects vaccine availability and access. The ISCON health centre at Portee community is small and lacks basic infrastructures such as a cooling facility to keep vaccines at the right temperature. As such, health workers were unable to store vaccines at the health centre, which affected vaccination exercises. Instead, the vaccines were stored at the Rokupa Government Hospital about 1.5 kilometres away, which often impacted the waiting time to receive the vaccine:

**“Our problem is with solar refrigerators to cool and maintain the quality of the vaccine. We store our vaccines at Rokupa Satellite Government Hospital. We stock our vaccine carriers for a week wherein we routinely change our pack for the week.”**

(HCW\_FRM-02)

This meant long waiting times which further impacted women’s ability to take the vaccine, especially considering the domestic and livelihood responsibilities noted above. Despite these challenges, health workers emphasised that they had worked hard to ensure vaccines were made available at the health centre.

### 3.4.3 Convenience

We explored vaccine deployment and access through the convenience of accessing a vaccine, primarily in relation to distance to access the vaccine and feasibility for mobile teams to access certain sections of the Portee-Rokupa community. These spatial limitations created different experiences in women’s access to vaccines



A makeshift (panbody) house at Portee-Rokupa. Credit: SLURC.

and were compounded by challenges for some women to access information about where to receive a vaccine. A young woman for example expressed difficulties in accessing the vaccine despite her decision to take it:

**“I decided to take the vaccine, but I have not seen the health workers administering the vaccine since the time I made up my mind to take it. Besides, I still do not know where else to take the vaccine.”**

(INF\_Y\_13)

Men also had concerns about vaccine deployment strategies which they thought might have impacted access to vaccines. One of the challenges was that because of the constraints mentioned above, vaccines were not always immediately available at the health centre and this discouraged people living far from the health centre to come and take the vaccine.

The main factor influencing whether respondents reported finding it difficult or easy to access the vaccine was whether they lived closer to the formal neighbourhood or whether they lived in the informal

settlement. For those living in the formal section, the community health centre where vaccines were being administered was reachable. Similarly, certain parts of the informal settlement were harder to reach by the mobile vaccination teams and platforms that residents in the formal area cited as good channels of information:

**“[...] There were three ways/areas to access the vaccine: community outreach by health workers, the health centre, and at TUMAC where loudspeakers were placed to get people aware of the vaccines and to encourage them to get vaccinated.”**

(W\_FRM\_Y\_04)

Health workers also stated that access to vaccines was made possible through the availability of mobile and health centre vaccination teams who used different communication channels to reach out to community members.



Drainage used for waste dumping at Portee-Rokupa. Credit: SLURC.

**“[...] There were three ways/areas to access the vaccine: community outreach by health workers, the health centre, and at TUMAC where loudspeakers were placed to get people aware of the vaccines and to encourage them to get vaccinated.”**

(W\_FRM\_Y\_04)

### 3.4.4 Healthcare Worker-Patient Relations

We already noted above that experiences of healthcare can impact vaccination in general and that constraints in access to healthcare in Freetown’s informal settlements are significant. In this study, respondents also pointed directly to health worker attitude as a challenge to vaccine access. Male participants were more concerned about what they perceived to be the negative attitude of the health workers, pointing out that many lacked patience in dealing with community residents. This, they said affected the dissemination of messages about the health benefits of taking the COVID-19 vaccines. Participants described their perception of the vaccinators’ attitude towards community residents negatively, and argued that they lacked the skills to motivate community residents to take the vaccines. A male participant and a female described this in an interview, first starting with the man:

**“They lack the patience to educate people about the relevance of taking the vaccine; ... They instead utter harsh statements that discourage people from taking the vaccine. For instance, they would say ‘if you do not take the vaccine, you will die if you get infected with the virus’... And they do not provide any form of guidance whether the person will be safe after taking the COVID-19 vaccine. This is the main reason I decided not to take the vaccine.”**

(M\_FRM\_Y\_03)

It is important to link these experiences to the realities of motivation and workload challenges faced by healthcare workers, as noted above, which can impact their ability to engage positively with patients.

## 3.5 COMMUNICATIONS PATHWAYS

We explored communication pathways for COVID-19 in the community. For most women, access to information on COVID-19 was mostly through health workers within the health centre and in the community. To reach a diverse audience, health workers disseminated COVID-19 messages to households to get them informed about pending vaccination campaigns, as described by a young woman:

**“We most times get COVID-19 information from the hospitals, but we also get informed through the town crier who passes around the community especially in the early hours of the night when many people have returned from their places of work.”**

(W\_INF\_Y\_06)

Health workers noted the importance of engaging trusted stakeholders and this had allowed for a shift in community members' perspectives on the vaccine over time:

**“I think the message around the COVID-19 vaccine are now clear because the people we trust have been involved through workshops and other engagements. It was extremely difficult at the start as people had misconceptions about the vaccine. But with constant engagement and persuasion, things are getting better because we now see people coming to the health centre to take the vaccine voluntarily.”**

(HCW\_FRM\_01)

This is particularly significant if we considered unequal access to education for women which, as we saw above, can mean that women have less access to formal information platforms. Among the channels of communication, radio was cited as the most dominant source of information because it was more accessible by people in the informal areas, particularly those who did not own a TV set. Women also mentioned that the chief was a vital source of information as he deployed town criers to disseminate information. In terms of the

appropriateness of information, one woman stated that health workers often disseminated messages in local languages such as Krio and Temne which are widely spoken by community residents. Health workers were cited, particularly by men, as the primary source of information on vaccines. Information from health workers was enhanced through door-to-door sensitization by health workers assigned to the community health centre. This combined with house-to-house vaccination campaign was seen to increase access to the vaccine and information about it, as well as building trust between health workers and residents. Health workers taking the vaccine in front of community members was also noted as an effective effort at trust building.

Participants counted on social media platforms particularly WhatsApp as other important sources of information on COVID-19 vaccination. Although having access to a smartphone was a factor, even those who do not have direct access to social media, participants said that they were influenced or provided information by their younger relatives who had access. Indeed, age was significant as younger people and particularly younger men, emphasised social media as a key source of information. A young man from the informal settlement expressed how demographic variation influenced differential access to information on COVID-19:

**“One of the sources I trust the most is information from social media because I have a smartphone where I easily access information from credible sources. As young people, we have better access to information because of the use of smartphones.”**

(M\_INF\_Y\_03)

### 3.5.1 The effects of rumours and social media on vaccine uptake

Social media was both a source of information and potential (mis)information. As part of this study, we explored the role that rumours propagated through social media had on participants' perspectives of the COVID-19 vaccine. Participants' narratives highlighted a strong relationship, particularly as doubts about the veracity of COVID-19 were primarily spread through social media platforms. Female participants stated that rumours about COVID-19 vaccines discouraged people from taking the vaccine because they believed that the vaccines

included poisonous substances “to kill people slowly”. Some of the rumours that participants reported as circulating on social media hinted that the vaccines had expired and that taking them would cause future health problems. Participants stated that some of the rumours caused fear and prevented many people from taking the vaccine. Some participants talked about a ploy to reduce the African population through COVID-19 vaccine:

**“There is a rumour circulated that the vaccine is produced to kill people slowly in Africa. That is why it is supplied in Africa to reduce the Africa population in the next five years.”**

(W\_FRM\_Y\_04)

Similar theories about the reality of COVID-19 and the vaccine were also shared by male participants. In this group, rumours that COVID-19 was created by the government to make money at the detriment of the public was also often cited. Historical marginalisation of communities in informal settlements may go some way in explaining why these rumours may take hold, as they reflect low trust in vaccine information coming from the government or national institutions set up to drive the response to COVID-19. Local stakeholders such as chiefs and other community leaders as well as known healthcare workers, as seen above, were more likely to find ways to build trust.



Queueing up water at Portee-Rokupa. Credit: SLURC.

# 4

# Conclusion

---

The story of COVID-19 vaccination in Sierra Leone has overall been a successful one and there are important lessons to be learned for future outbreaks.

In this process, it is interesting not to forget the intersection of different forms of inequality and how they might impact perspectives and experiences of emergency vaccination. In this report we have highlighted how considerations gender and informality shaped the context in which residents of Portee-Rokupa decided to take COVID-19 vaccines, the factors influencing these decisions and the challenges and opportunities they faced in accessing a COVID-19 vaccine if they chose to take one.

Social and structural drivers of health inequalities, from access to functioning health facilities to trusting relations with health providers, are visible in marginalised urban settlements. Yet, amongst these, factors such as gendered and other power differentials are often overlooked in health system planning and emergency responses. Women's livelihoods, the social norms and expectations placed on them, their own fears, hopes and expectations about health, sexuality and social relations all matter when it comes to understanding vaccination decisions and experiences in context. Prior experiences of healthcare, trusting relationships (or lack thereof) with healthcare workers, concerns specific to the COVID-19 vaccines and broader access challenges, all contributed to our participants' engagement with vaccination campaigns. Some factors were specifically gendered, such as fertility concerns or ability to make individual decisions and the kinds of interactions women have with the health system. Patriarchal social structures and norms coupled with harsh economic realities meant at times women had to compromise healthcare access to prioritise childcare and financial support to their families. Unequal access to education influenced women's access to information but efforts by health workers to disseminate information through trusted stakeholders and personal dialogue alleviated some of these

challenges. Other factors were more broadly related to the realities of informality in the Portee-Rokupa community and structural challenges in the health system.

Future emergency vaccine deployment efforts must include in depth intersectional analysis that pays attention to gendered experiences and how these are mediated by other factors such as poverty and informal livelihoods. Emergencies exacerbate trust between communities and health workers, which is often already eroded by underfunding and infrastructural challenges. Mistrust in the system as a whole impacts willingness to take vaccines, and supply and access challenges further undermine efforts to build vaccine confidence. In Sierra Leone, experiences with epidemics of Ebola and COVID-19 have posed particular challenges to trust but they have also generated significant learnings, including the importance of contextualised approaches and meaningful community engagement. Future efforts must take these lessons as a starting point to ensure gender justice is a key component of our approaches to vaccine equity.

## 4.1 RECOMMENDATIONS

---

Acting upon the findings of this study, we have outlined recommendations for the consideration of practitioners in emergency response and vaccine deployment at the Ministry of Health and Sanitation (including the Directorate of Health Security and the Expanded Programme on Immunisation), the Ministry of Gender and Children's Affairs, NGOs and international partners. In an effort to acknowledge that some of the factors noted in this report are deep-rooted structural factors that cannot be easily addressed, we divide these recommendations into short-fixes and long-term considerations.



## SHORT-TERM FIXES

### Gender- Responsive Vaccine Programming

- Current vaccine programming tends to be gender blind. To promote gender sensitive programming, we recommend that development of vaccine deployment strategies must **include detailed and contextual and intersectional gender analysis from the start**, paying particular attention to how gender norms and gendered livelihoods might influence vaccine confidence and uptake for different groups.
- Women’s and men’s experiences of vaccination and their ability to make decisions about taking a vaccine are not the same. A gender-responsive approach could include a redesign of vaccination strategies’ timing, deployment mechanisms and community engagement to consider:
  - Avoiding periods of the day when women are not heavily involved in livelihood and household engagements
  - Providing variegated access pathways
  - Developing gender-sensitive community engagement: this means both eliciting dialogue with a wide range of women’s groups and developing community engagement efforts that directly respond to women’s concerns
- Communities and particularly **women’s groups should be actively involved in advising vaccination programming**—both routine and emergency—right from the start to facilitate the development of adaptive strategies such as the mobile clinics.
- Women and men are not homogeneous groups. For example, one women’s organisation may not represent all women’s views and interests. It is important to **map trusted sources of information and mobilisation** within different communities. Mapping exercises should identify differences even within individual communities, as who is trusted will be influenced by gender, socio-economic and other relevant social characteristics.

- Women’s decision making can be constrained by societal norms. Vaccination strategies must therefore **seek collaborations with gender transformative programmes** to consider how adult immunisation can be aligned to ongoing effort to empower women.
- The design of vaccine messages must **integrate local knowledge and experiences into planning to address concerns and increase dialogue** about the benefits of vaccine uptake. For example, local information campaigns must address women’s fertility concerns and use appropriate pathways to do so.



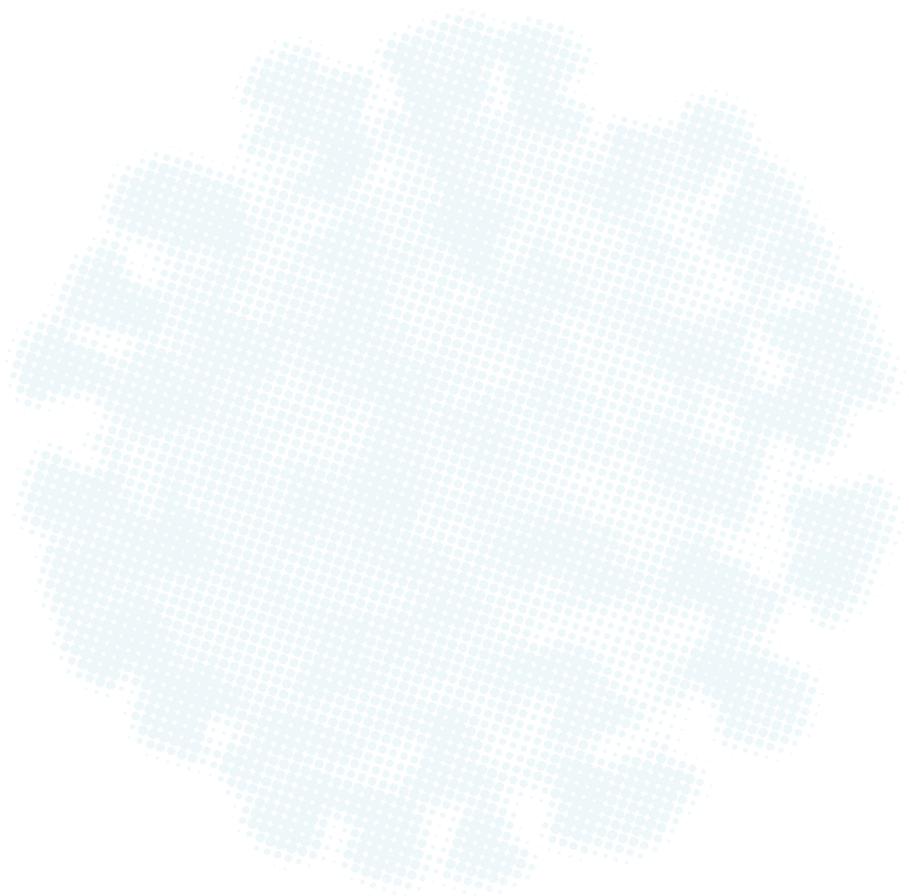
## LONGER-TERM CONSIDERATIONS

### An Integrated, Health System Approach

- Vaccine deployment must follow an **integrated approach**. This includes considering how emergency vaccines can be best delivered alongside other routine services, improving cold chain and storage facilities and how health workforce motivation can be sustained. It also means that long-term health-system strengthening is required to deal with structural challenges affecting health workforce motivation, as well as short-term logistical solutions.
- Trusted community stakeholders must be identified in a diversified way so as to reach different groups. These relationships must be built and maintained over time to strengthen trust in the health system as a whole and vaccination in particular. Finding community leaders and channels that are appropriate to reach women in different communities, and building on existing relationships is paramount.



20. Beoku-Betts, J. & M’Cormack-Hale, F. *War, Women and Post-conflict Empowerment: Lessons from Sierra Leone*. *War, Women and Post-conflict Empowerment: Lessons from Sierra Leone* (Bloomsbury Publishing, 2022).
21. Cutler, D. M. & Lleras-Muney, A. *Education and health: evaluating theories and evidence*. (National bureau of economic research Cambridge, Mass., USA, 2006).
22. Statistics Sierra Leone. *Sierra Leone Demographic and Health Survey*. (2019).
23. Denney, L., Gordon, R. & Ibrahim, A. Teenage Pregnancy after Ebola in Sierra Leone.’. *London Overseas Dev. Inst.* (2015).
24. Amnesty International. Sierra Leone: Regional court ruling gives hope to thousands of pregnant girls banned from school. (2019).
25. Chandler, C. *et al.* Ebola: Limitations of correcting misinformation. *Lancet* **385**, 1275–1277 (2015).
26. Enria, L. *et al.* Power, fairness and trust: understanding and engaging with vaccine trial participants and communities in the setting up the EBOVAC-Salone vaccine trial in Sierra Leone. *BMC Public Health* **16**, 1140 (2016).
27. Karafillakis, E., Van Damme, P., Hendrickx, G. & Larson, H. J. COVID-19 in Europe: new challenges for addressing vaccine hesitancy. *Lancet* **399**, 699–701 (2022).
28. Tengbeh, A, Enria, E Smout, E Mooney, T Callaghan, M Ishola, D Leigh, B Watson-Jones, D Greenwood, B Larson, L. L. S. “We are the heroes because we are ready to die for this country”: Participants’ Decision-making and “Grounded Ethics” in an Ebola vaccine clinical trial. *Submitt. to Soc. Sci. Med.* (2017).



**London School of Hygiene  
& Tropical Medicine**

Keppel Street, London WC1E 7HT  
United Kingdom

[www.lshtm.ac.uk](http://www.lshtm.ac.uk)

 [@LSHTM](#)

 [@LSHTM](#)

 [@LSHTM](#)

 [lshtm.ac.uk/linkedin](https://www.linkedin.com/company/lshtm)

 [lshtm.ac.uk/study/blogs](https://lshtm.ac.uk/study/blogs)

 [lshtm.ac.uk/youtube](https://www.youtube.com/lshtm)

---

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE

