



**Knowledge, Attitudes, and Practices Related  
to COVID-19 of Burundian Refugees in  
Mahama Camp**

**Rwanda**

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## Executive Summary

The COVID-19 pandemic is a global crisis and Rwanda adopted unprecedented measures to control the rapid spread of the virus. Accordingly, an appropriate response plan is needed with consideration for the high population density in refugee camps and/or in urban areas. It is necessary to find out refugees' knowledge, attitudes, and practices (KAP) towards COVID-19, before implementing interventions to provide an adequate response. This study was carried out to identify gaps, challenges, and areas to enhance current communication strategies in response to COVID-19 specific to humanitarian settings.

The study was purely based on a quantitative approach. The response rate was 100% with a study sample of 1,046 refugee respondents in Mahama Camp. The total respondents included 18.93% (198) persons with disabilities. 529 (50.6%) respondents were male and 517 (49.4%) females. Mean age of the respondents was 48.23, with a minimum age of 18 years old and a maximum age of 98 years old. The majority of the participants were unemployed 840 (80.3%) which is the case for most refugees in the camp.

The present study was able to provide a snapshot and useful information about refugees' knowledge, attitudes, and practices related to COVID-19. The findings suggest that refugees have an acceptable level of knowledge on COVID-19 and are generally positive in their outlook on overcoming the pandemic.

All refugees are aware and informed about COVID-19 (99.81%), and 82.38% explained COVID-19 is a virus. The refugees exhibited high knowledge on the mode of transmission and preventive measures, as reported by 90.22% and 96.93%, respectively.

Regarding vulnerable populations, the majority reported that elderly people are at high risk (78%), followed by adults (10.5%). Almost all respondents reported to believe that COVID-19 is dangerous and a risk to their life, however 40% of the respondents indicated that children do not see any danger from COVID-19. In addition, one in five respondents showed a lack of belief towards the likelihood of becoming sick with the virus. This suggests that there is a wide variation between danger towards adults/elderly and children, and could be because adults are more likely to worry, develop anxiety, and fear dying compared to children. The results also imply that children might not be aware of the risk and complications of this disease which could diminish adherence to prevention measures in terms of social distancing and hand washing, especially at CYFS. Regarding the implementation of preventive measures, about

91.5% of participants reported that they were following measures to prevent individual and family members from becoming sick with COVID-19 and 83.3% reported the community do so as well. Only 58.5% reported that they would go to the hospital/health unit if a family member showed symptoms of COVID-19 indicating that a clear protocol is not widely known by refugees on how to respond to a person showing signs of COVID-19.

The respondents also indicated that the community faces barriers in accessing appropriate materials to prevent COVID-19 with 77.3% of respondents reporting not having enough washing materials. In addition, 18.9% of the respondents confirmed that there are ongoing programmes that involve mass gatherings, group meetings, etc. in the community. There are other challenges reported including barriers to access to food and supplementary food for children as well as barriers related to restrictions on movement. Respondents also noted insufficient family budget to buy food and an increase in prices since the outbreak of the pandemic.

In addition, 62.9% of the surveyed refugees confirmed social distancing challenges and indicated barriers to the implementation of social distancing, such as at least 1 meter between people at the queue at the food distribution station, at the toilet/washroom (22.8%), and at the health center (22.8%), even though preventative measures should be closely observed in settings with high population density.

**In summary, Burundian refugees exhibited an adequate level of knowledge, attitude, and practices regarding COVID-19.** Consistent messaging from the government and/or health authorities are key to aid public knowledge and understanding of COVID-19.

The Government of Rwanda, its partners, and UN agencies should continue their public and health education campaigns, with a focus on:

- Clarifying that everyone can be infected with COVID-19, and can spread the virus to others, even if they themselves are not at high risk for severe illness.
- Recognizing the flood of information about COVID-19 from a variety of channels. Therefore, the messaging should focus on accurate prevention measures (handwashing, face masks, staying within the compound/community), and access to sanitation materials.

- Sensitization about protocols relating to COVID-19 and appropriate responses to people showing symptoms of the virus.



## **Introduction**

Since 2015, Save the Children Rwanda has been providing essential health and child protection assistance to Burundian refugees in Mahama Camp located in Kirehe District, Eastern Province. As the world continues to deal with the COVID-19 pandemic, Rwanda has put in place its country preparedness and response plan, including activities related to refugees who are at higher risk due to population density in camps and/or urban areas. Necessary prevention measures have been put in place to protect the refugee population hosted in Rwanda including the delivery of quality and timely information about COVID-19.

A variety of communication strategies have been developed and employed by Save the Children, other NGOs, and the Government of Rwanda to disseminate information on prevention measures against COVID-19. With the outbreak of COVID-19 and ensuing prevention measures, there is a need to understand how vulnerable groups, such as refugees, are supported to get information to circumvent anxiety and panic. In addition, it is important to understand the dynamics behind implementing prevention measures despite known challenges in the camps related to social distancing and hygiene like the prevalence of hand washing despite lack of clean water and appropriate materials (soap, hand sanitizer, towels, etc.).

The study recognized that COVID-19 patients may be asymptomatic or develop flu-like symptoms such as fever, dry cough, tiredness, and shortness of breath. So far, in Rwanda, it is advised that immediate medical attention is sought when there is any suspicion of contact with a positive patient. Thus, the Government of Rwanda has declared a national lockdown in full effect in March and April, except for emergency services, and established stay-at-home orders, including confinement to the camps, to avoid contact with others.

To maximize the effectiveness of prevention efforts, refugees' adherence to measures is important, which is generally affected by refugees' knowledge, attitudes, and practices (KAP) towards COVID-19. Clearly, understanding Burundian refugees' awareness of COVID-19 prevention remains a complex situation. Moreover, the study attempted to understand local barriers, uptake, and adherence to public measures in a different community with attention to humanitarian settings.

## **1.1 Research Objectives**

The research focused on understanding local barriers and factors enabling the uptake and adherence of prevention measures to control the spread of COVID-19 among refugees along with identifying and testing appropriate messages to support interventions. The study helped us to understand the level of knowledge, attitudes, and practices around COVID-19 prevention measures among refugees. Hence, gaps, challenges, areas of improvement were identified which need more attention in the current communication strategies in terms of COVID-19 messaging in humanitarian settings.

## **1.2 Research Questions**

This study aimed posed the following questions:

- a) What is the level of knowledge and practice towards protective measures against COVID-19 among Burundian refugees in Mahama Camp and in urban areas?
- b) What are the major barriers and challenges that affect access and participation to COVID-19 prevention measures for refugees in Mahama Camp and urban areas?
- c) What pathways or opportunities are available for refugees to support the communication of appropriate messages around COVID-19 and prevention measures and response interventions?

## **1. Methodology**

To answer the above questions, a quantitative approach was used to understand underlying factors regarding gaps which lead to low knowledge and practice of prevention measures around COVID-19 as a result of ineffective communication and messaging mechanisms. To gather quantitative data, the study adopted a systematic random sampling approach based on the communities and the structure of households.

### **2.1 Sampling Strategy**

The evaluation used stratified random sampling by selecting three categories of project beneficiaries: (i) adult people aged 18-59 years old, (ii) Elderly people (60+ years) and (iii) people living with disabilities. Beneficiaries were then selected using systematic random sampling. Under each category, we used the following formula to select a representative sample:

$$n = \frac{N}{1 + N\varepsilon^2}$$



Where, ( $n$ ) the sample size, ( $N$ ), the size of the population and ( $\varepsilon$ ) margin of error is 5% at the confidence level of 95%.

## **2.2 Data Collection**

The data collection was conducted by community volunteers working with Save the Children. Enumerators were trained on the use of data collection tools, including the interview guide and the use of tablets, and research ethics before beginning data collection. The structured questionnaire was digitalized in KoBo Toolbox, a web-based data collection platform ([www.kobotoolbox.org](http://www.kobotoolbox.org)), and on average interviews took approximately 35 minutes each. Save the Children Child Protection staff supervised and monitored fieldwork activities to ensure the collection of high-quality data. Review meetings with Save the Children evaluation team (CP staff and MEAL staff) and enumerators were held at the end of each day to assess challenges faced during the day and adopt an appropriate mechanism to address potential issues.

## **2.3 Data Analysis**

Summary statistics including average were calculated to investigate the demographic characteristics of respondents. The analysis was done in a way that clearly describes the status of refugees' KAP around COVID-19, and analysis was performed using Stata 16.0 and Microsoft Excel. Furthermore, responses were coded to arrive at clusters to tabulate percentage responses. The data was analyzed primarily through frequency tables and cross-tabulations to filter the required information; key demographic variables included for some analyses were: sex, age, education level, and occupation.

# **3. Findings**

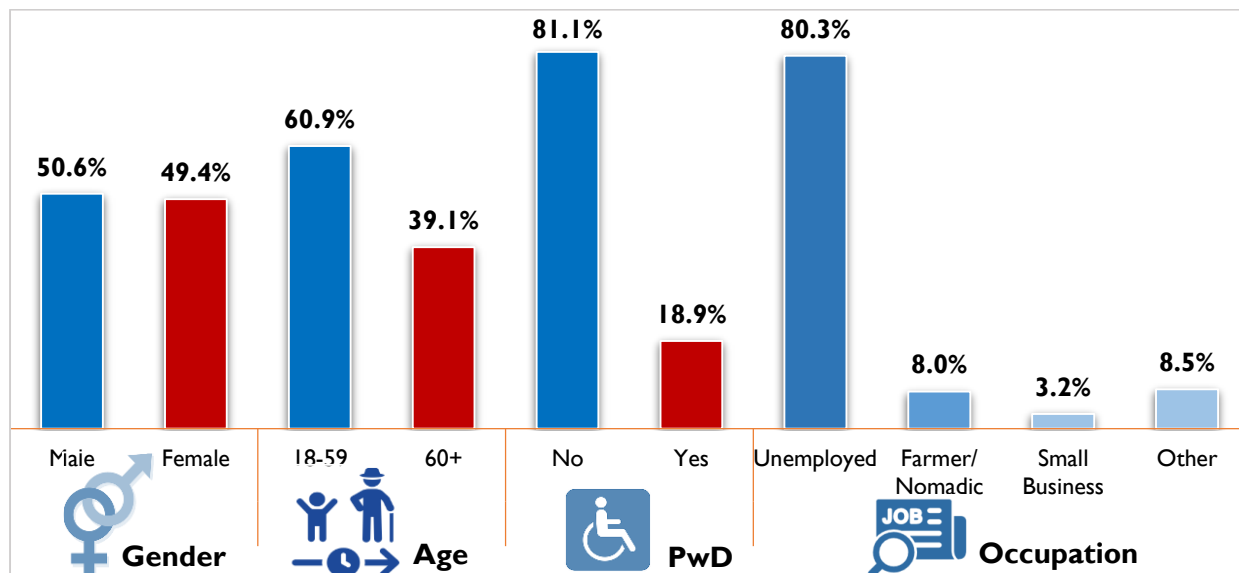
The COVID-19 KAP survey included 1,046 respondents sampled in all Mahama Camp communities of Burundian refugees.

## **3.1 Socio-Economic Profile of the Refugee Respondents**

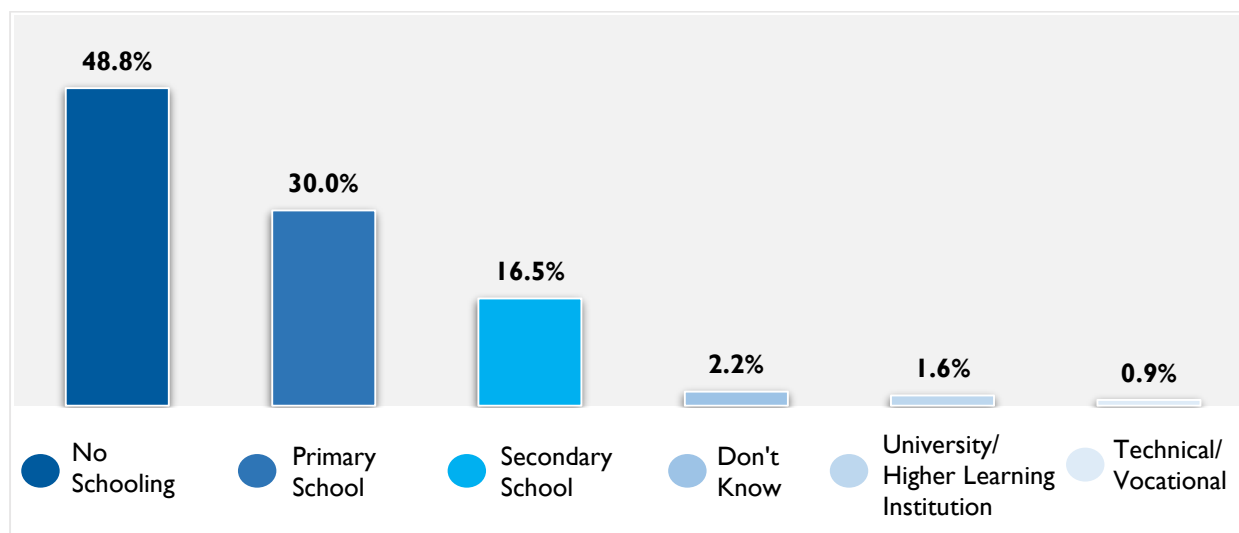
There were a total of 1,046 respondents. The total respondents included 18.93% (198) persons with disabilities. 529 (50.6%) were male and 517 (49.4%) females. Mean age of the respondents was  $48.23 \pm 19.3$  years, with a minimum age of 18 years and a maximum age of 98 years. Figure 1&2 show the socio-demographic characteristics of the participants. A majority of the participants were unemployed (840 (80.3%)), others *i.e.* students (89 (8.5%)), farmers (84 (8%)), and refugees with small business (33(3.2%)). More than 480 (~47%) had at

least a primary level of education, among them 172 (16.5%) had a secondary level of education, and a minority had an ordinary diploma or a certificate.

**Figure 1: Socio-Demographic Characteristics of the Participants**



**Figure 2: Educational level of the Participants**



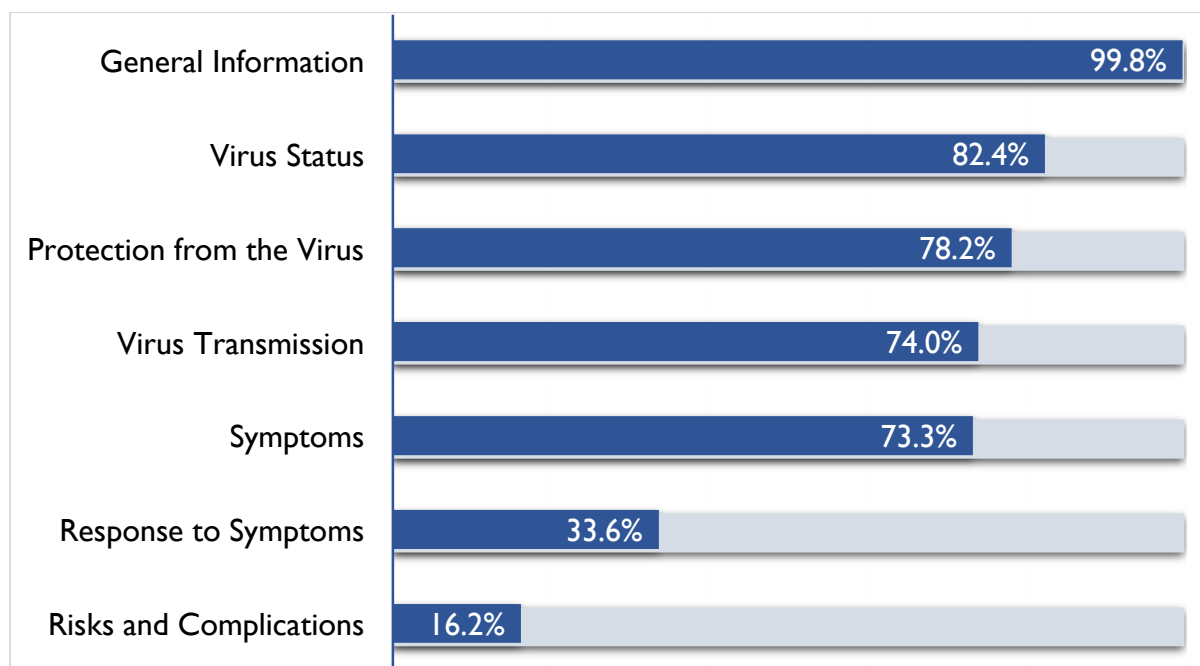
### 3.2 Knowledge of COVID-19 in Mahama Camp

#### 3.2.1 Information on COVID-19

Refugee communities are at a high-risk with the spread of COVID-19. Save the Children Rwanda wanted to know if Burundian refugees had ever heard about the novel coronavirus. The results show that all refugees (99.8%) are aware and informed about COVID-19 and

82.38% indicated that COVID-19 was a virus. About three-fourths of the respondents reported to have heard information about how to protect against the virus (78.6%), virus transmission (74%), and symptoms of the virus (73.3%), however few heard about what to do when symptoms occur, risks, and complications of the disease. This suggests that most information shared is about the disease (symptoms and transmission) but there is less messaging available explaining guidelines and the protocol to be followed once someone shows symptoms.

**Figure 3: Information on COVID-19 in Mahama Camp**



Thus, the data suggests that public health and media efforts should focus on raising awareness on COVID-19, especially, how to behave when personal symptoms occur and how transmission happens in the camp.

### **3.2.2 Sources and Trustworthiness of Information on COVID-19**

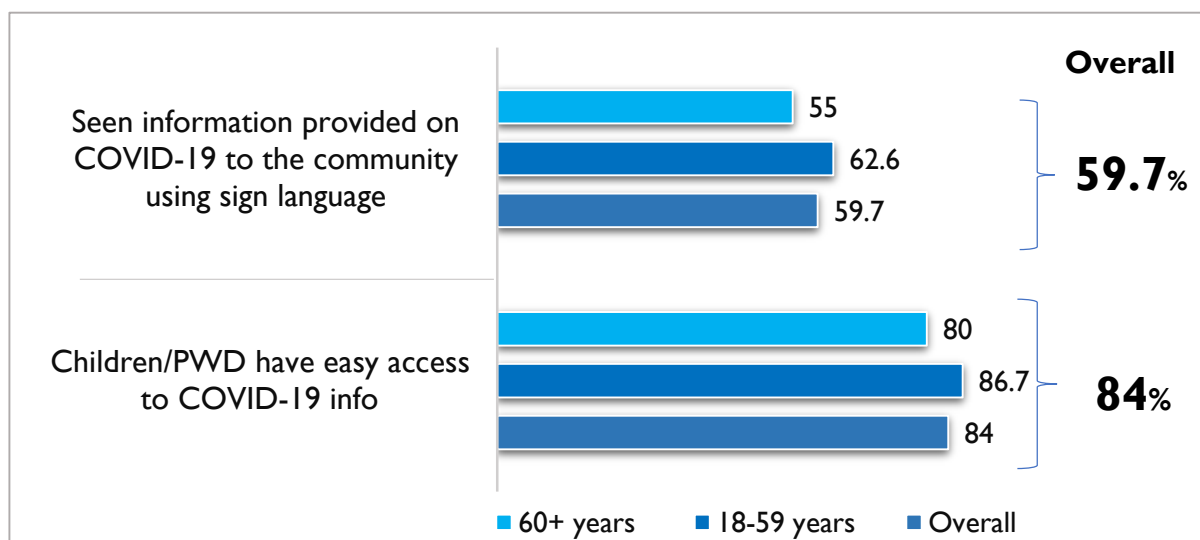
The main sources of information about COVID-19 were health care workers, community health workers, radio, and NGOs i.e. Save the Children.

**Table 1: Sources and Trustworthiness of Information Received on COVID-19**

	Source	Trusted Source
	%	%
Radio	37	64.5
Television	1.3	1.1
WhatsApp	6.9	2.7
Social Media	10.2	4.8
Health Care workers	47.2	33.5
Family Members	16.2	7
Received info from friends	18.3	6.1
Community Health Workers	43.9	27.8
Save the Children	42.8	24.6
Other Community	19.7	10.3
Community leaders	8	6.1
Religious Leaders	0.5	0.2
Traditional Midwives	0.4	0.4
Someone from the community	7.3	1.5
Someone from the camp	2.7	1.9
Info from other NGOs	28.8	13.4

Hence, sources of information were linked with Save the Children’s role in Mahama Camp as a result of its role in the management of a health facility and other humanitarian activities. In addition, respondents were asked to identify the most trustworthy source **of information received related to coronavirus**, and radio was reported as the most trusted channel (64.5%). Radio might be perceived as the most trustworthy source of information because it can give listeners updated information on COVID-19 around the world, and in the region, before other sources.

**Figure 4: Easy Access to Information on COVID-19 to Children and PWD**



84% of respondents reported that children and people with different disabilities have easy access to information regarding the new coronavirus and 59.7% indicated that they have seen information provided on coronavirus to the community using sign language and other formats used by persons with disabilities, where 62.6% of PWD confirmed so.

### 3.2.3 Knowledge of Burundian Refugees on COVID-19

Respondents reported to have knowledge regarding COVID-19, especially information on the mode of transmission and preventive measures, as reported by 90.22% and 96.93% of respondents, respectively (See detail Annex 1).

In relation to preventative measures, social distancing and frequent hand washing are emphasized; however, such measures are difficult to implement in the context of refugee camps due population density and insufficient access to resources. Nevertheless, only 78.45% of the respondents confirmed that they are likely to become sick with COVID-19 (Table 2).

**Table 2: Knowledge of COVID-19 Prevention Measures**

	Average	18-59 Years	60+ Years	PwD
	%	%	%	%
Spread of COVID-19	90.22	93.9	84.5	89.4
COVID-19 Symptoms	87.26	89.6	83.5	83.8
COVID-19 Prevention Measures	96.93	97.5	96.1	98.5
Likely to Become Sick with COVID-19	78.45	79.3	77.1	76.8

As far as knowledge and attitudes towards COVID-19, camp management and community leaders are responsible to control threats to virus transmission and refugees should be informed about potential risks. Furthermore, efforts to sensitize the refugee population should continue to be made since one in five respondents showed a lack of knowledge on the likelihood of becoming sick with the virus.

### 3.3 Attitudes Towards COVID-19

Across the three categories, the majority of respondents reported that elderly people are the most at high risk (78%), followed by adults (10.5%). However, respondents indicated a low risk for other categories of people which might also be at risk. The WHO<sup>1</sup> briefing advised that “people of all ages can be infected by COVID-19. Older people, and people with pre-

<sup>1</sup> WHO. Coronavirus disease 2019 (COVID-19): Situation Report – 51 (March 2020) <https://cutt.ly/MyB0e1W>  
 Accessed on 5<sup>th</sup> June 2020

existing medical conditions (such as obesity, asthma, diabetes, heart disease) appear to be more vulnerable to becoming severely ill with the virus.”

**Table 3: Attitudes Towards COVID-19 Prevention Measures**

	Average	18-59 Years	60+ Years	PwD
	%	%	%	%
<b>High-Risk Category</b>				
Child <5 Years	4.9	5.7	3.7	5.6
Adolescent up to 15 years	3.2	3.6	2.5	
Adults	10.5	11.1	9.6	10.6
Elderly	78	75.5	81.8	79.3
Pregnant Women	1.9	2.5	1	2.5
Health Care Workers	1.5	1.6	1.5	2
<b>Danger from COVID-19</b>				
Very Dangerous	95.8	96.3	94.9	97.5
More/Less Dangerous	1.7	1.3	2.3	1
No Danger	2.5	2.3	2.8	1.5
<b>Children Perception</b>				
Very Dangerous	39.6	41	37.3	40.4
More/Less Dangerous	20.4	19.6	21.6	17.7
No Danger	40	39.4	41	41.9
Stigma	41.6	38.5	46.4	46.5

Furthermore, almost all respondents reported to believe that COVID-19 is dangerous and a risk to their life, although 2.5% of the respondents are not seeing any danger from the virus itself. 39.6% of the respondents revealed that children perceive COVID-19 to be dangerous while 40% of the respondents indicated that children do not see any danger of the virus. The variation between danger towards adults/elderly and children is quite high and might be because adults are likely to worry, develop anxiety, and fear dying compared to children. This suggests that if children are not perceiving any danger from COVID-19, it is not even easy for them to follow the required preventive measures.

As seen on Table 3, 41.6% of respondents indicated that COVID-19 would generate stigma against certain groups of people and mainly indicated people coming outside from the country and the camp itself. Hypothetically, stigma occurs when people negatively associate an infectious disease, such as COVID-19, to the specific people. Unfortunately, this means that people might be labelled, stereotyped, separated, and/or experience loss of status and discrimination within the community because of a potential negative affiliation with the

disease. Health educators and awareness raising strategies should consider stigma for suspected cases and confirmed ones to dispel harmful stereotypes.

### 3.4 Practices related to COVID-19

Practices regarding COVID-19 were measured by asking what respondents do to protect themselves from COVID-19 at the family and community level, what they would do if respondents' experience symptoms, and the rate of following measures.

91.5% of participants reported that they were following the recommended measures to prevent individual and family members from becoming sick with COVID-19 (See detail Annex 2). Regarding how respondents would handle cases of family members showing symptom, more than half reported to prefer going to the hospital/health unit (58.5%), while the remaining participants did not show enough knowledge about practices. This suggests that the protocol in the case of refugees showing symptoms of COVID-19 is not widely known.

**Table 4: Practices related to COVID-19 Prevention Measures**

	Overall	18-59 Years	60+ Years	PwD
	%	%	%	%
Prevent Family from Becoming Sick	91.5	91.3	91.9	93.9
<b>Handling Symptoms</b>				
Requesting Advice	7.4	8	6.4	3
Hospital/Health Unit	58.5	56.3	61.9	64.6
Neighborhood Nurse	3.9	3.8	4.2	3.5
Traditional Healer	0.3	0.2	0.5	5.6
Quarantine	8.7	8	9.8	23.2
Other	21.1	23.7	17.2	3
Measures Taken within the Community	83.3	83.7	82.6	80.8
Majority Follow the Measures	73.9	75.7	71.1	78.3

Save the Children wanted to understand if there are preventive measures taken by the community. 83.3% respondents reported to have appropriate measures for preventing new coronavirus, and the majority of them have followed the measures (73.9%). When examining the differences within categories, the majority of respondents have taken COVID-19 prevention measures.

### 3.5 Community: Barriers and Challenges due to COVID-19

The refugees' responses at the community level include measures taken to prevent the spread of COVID-19 (Table 5) and only 18.9% of the respondents confirmed that there are ongoing

programmes that involve mass gatherings, group meetings, etc. in the community. Accessing appropriate materials is a barrier to prevention measures with 77.3% of respondents reporting to not have enough washing materials. There's a need to clarify to the refugees how to deal with preventive measures and camp management should offer enough sanitary materials for hand washing, especially at mass gatherings.

**Table 5: Community: Barriers and Challenges due to COVID-19**

	Overall	18-59 Years	60+ Years	PwD
Ongoing Programmes that Involved Mass Gatherings	18.9	20.6	16.4	19.2
Barriers to Sanitation Materials	77.3	77.6	77	75.3
<b>Barriers Related to the Access of Food/Supplement for Children</b>				
Accessibility	68	67.8	68.2	69.2
Availability	7.3	8.5	5.4	4.5
Quality	0.7	0.8	0.5	0.5
Other	24.1	22.9	25.9	25.8
<b>Barriers in Accessing Food for Refugees</b>				
Not enough food	25.2	23.7	27.6	16.2
Not enough sellers	5	5.5	4.2	4
Not enough money	57.5	58.6	55.7	67.7
Other	12.3	12.2	12.5	12.1
<b>Barriers related to the Social Distancing at:</b>				
Health Center	32.1	35.8	26.4	27.3
Food Distribution	41	45.2	34.5	38.9
Toilet/Washroom	12	14.3	8.1	10.6

Furthermore, when asked “What barriers does the community face to access the food and food supplements for infants and young children?”, 68%, of respondents confirmed movement restrictions established by the Government, social discrimination against certain groups, insufficient budget to buy food and food supplemental products for families, and rising costs since the outbreak of the pandemic, for the sample population and PWDs respectively (See detail Annex 3).

Hence, 62.9% of the surveyed refugees who confirmed social distancing challenges. 41% indicated community challenges to implement social distancing, for example, at least 1 meter between people on the queue at the food distribution stations and 32.1% when at the health center and 12% when going to use toilet/washroom. Participants also reported challenges in food access with 57.5% not having enough money, while 25.2%, do not have enough food- though it should be noted that food rations in Mahama camp are fully cash based.



### 3.6 Communications and opportunities for refugees during COVID-19

Information around COVID-19 is communicated using different channels including radio, social media, and phone. Save the Children wanted to understand phone access in relation to socio-demographic characteristics. The results show that 39.1% (409) respondents hold mobile phones and the majority are female (65.8%), people aged 21 to 40 years old (53.6%), and those with no schooling and primary education (71.9%). 88.75% who received the message related to COVID-19 of the total respondents holding phone. Of the people having phones, 19.8% are PWD. In the context of the refugee camp, having a phone gives the privilege of access to information related to COVID-19.

**Table 6: Communications and Opportunities for Refugees during COVID-19**

	Hold Phone	Basic Phone	Smartphone	Received SMS
<b>Overall</b>	39.1	74.75	25.25	88.75
<b>Sex of the Respondent</b>				
Male	34.2	80.71	19.29	33.2
Female	65.8	71.64	28.36	66.8
<b>Person with Disability</b>	19.8	72.84	27.16	37.37
<b>Age of the respondent</b>				
18-20 Years	5.9	91.67	8.33	36.36
21-30 Years	25.2	69.61	30.39	49.74
31-40 Years	28.4	65.52	34.48	61.33
41-50 Years	16.9	76.81	23.19	50.81
52-59 Years	5.4	63.64	36.36	26.03
60+years	18.3	92	8	16.87
<b>Level of Education</b>				
No Schooling	19.61	93.75	6.25	14.23
Primary School	38.73	84.18	15.82	45.51
Secondary School	35.54	60	40	75.82
Technical/Vocational	1.96	75	25	87.5
University/Higher	4.17	23.53	76.47	94.44

## 4. Conclusion

The survey conducted was a rapid assessment to generate evidence on current gaps in knowledge, attitudes, practices including perceptions and communication channels as well as social, cultural, and political barriers that hinder the adherence to preventative measures in Mahama Camp.

In summary, the present study was able to provide a rapid assessment and provided a useful snapshot on the situation of refugees' knowledge, attitudes, and practices toward COVID-19. The findings suggest that refugees have an acceptable level of knowledge on COVID-19 and

are generally positive in their outlook on overcoming the pandemic. Even so, consistent messaging from the government and/ or health authorities are key to aid public knowledge and understanding of COVID-19. Additionally, some categories of the population may benefit from specific health education programs to raise knowledge and improve practices related to COVID-19.

## **5. Recommendations**

**The Government of Rwanda, its partners, and UN agencies should continue their public and health education campaigns, with a focus on:**

- Clarifying that everyone can be infected with COVID-19 and spread the virus, even if they are not at high risk for severe illness.
- Recognize the flood of information on COVID-19 from a variety of sources; therefore, messaging can focus toward accurate prevention measures such as handwashing, face-masks, staying within compound/community, and access to sanitation materials.

**Use of reliable sources for coronavirus information:** It was found that the most trusted source of information on COVID-19 is the radio. This calls for camp management to come up with a method of updating Burundian refugees on COVID-19 including what is happening in their country and Rwanda as well to better give them accurate information regarding prevention measures, symptoms, and protocols if a person shows symptoms. In addition, information from the Ministry of Health should be reinforced via radio.

**Communicate the recommended protocol to follow in case of symptoms:** Only 58% of refugees reported to seek support from a health facility in case of COVID-19 symptoms while the remaining mentioned other methods. The camp management should sensitize people on different ways to prevent the spread of COVID-19 while seeking health assistance including the hotline number and self-quarantine while awaiting support.

**Provision of sanitary materials and enforcement of social distancing at mass gatherings:** 77.3%, do not have enough washing materials which calls for camp management to put increased attention on WASH as part of preventive measures. This goes along with social distancing at the food distribution station, health center, and toilet/washrooms where it is hard to follow the required 1-meter distance between people. Awareness among refugees should be raised to explain the importance of these preventive measures especially in this setting of high population density.

Camp management and community leaders should also be responsible to control any threat that might cause virus transmission and refugees should be informed about how COVID-19 relates to them. Sensitization on virus transmission should address a lack of concern among refugees with one in five respondents reporting a lack of knowledge on the likelihood of becoming sick with the virus.

## ANNEXES

### Annex I: Knowledge and Information towards COVID-19 (Percentage)

	Overall	18-59 Years	60+ Years	PwD	Sex: M	Sex: F
<b>Disease spread</b>						
Blood transfusion	1.3	1.7	0.7	1	1.3	1.4
Droplets from infected people	65.2	72.4	54.1	61.1	59.2	71.5
Airbone	51.1	50.5	52.1	44.9	52	50.3
Direct contact with infected people	46.6	46.9	46.2	35.4	47.8	45.4
Touching contaminated objects/surface	59.4	64.7	51.1	57.1	54.4	64.5
Sexual intercourse contact	3.4	3.8	2.7	1.5	4.3	2.3
Contact with contaminated animals	2.8	3	2.5	0.5	3.2	2.3
Mosquito bites	0.1	0.2	0	0	0.2	0
Eating contaminated food	0.4	0.5	0.2	1	0.4	0.4
Drinking unclean water	0.3	0.3	0.2	0	0.2	0.4
Don't know	4.7	2.7	7.9	5.6	6.6	2.7
<b>Disease symptoms</b>						
Fever	89.7	93.1	84.3	89.4	86.8	92.6
Cough	86.6	88.9	83	81.8	85.8	87.4
Shortness of breath and breathing diff.	55	60	47.2	52	52.7	57.3
Muscle pain	47.5	51.8	40.8	46.5	47.1	48
Diarrhea	1.2	1.1	1.5	1	2.1	0.4
Don't know	3.1	1.1	6.1	3.5	4.3	1.7
No symptoms	0.7	0.3	1.2	0	0.9	0.4
<b>Prevention of the COVID-19</b>						
Cover your mouth when coughing	61.7	68	51.8	64.1	56.9	66.6
Avoid close contact with anyone	49.3	52.6	44.2	48	47.6	51.1
Eliminate standing water	0.3	0.3	0.2	0	0.2	0.4
Cook meat and eggs well	0	0	0	0	0	0
Avoid unprotected direct contact	0.5	0.6	0.2	1	0.8	0.2
Don't know	1.1	0.3	2.5	1.5	1.7	0.6
Other	31.5	32	30.7	32.3	31	32

## Annex 2: Practices towards Covid-19 prevention measures (Percentage)

	Overall	18-59 Years	60+ Years	PwD	Sex: M	Sex: F
<b>Community: Prevention measures</b>						
Sleep under the mosquito net	0.1	0.2	0	0.5	0	0.2
Wash your hands regularly	76.2	77.6	74.1	74.2	74.9	77.6
Drink only treated water	1.1	0.9	1.2	0.5	1.7	0.4
Cover your mouth when coughing	34.5	36.3	31.8	34.8	30.4	38.7
Avoid close contact with anyone	32.9	33.6	31.8	27.8	32.1	33.7
Eliminate standing water	0.3	0.2	0.5	0	0.4	0.2
Cook meat and eggs well	0.2	0.2	0.2	0.5	0.2	0.2
Avoid unprotected direct contact	0.1	0	0.2	0.5	0.2	0
Other	3.4	2.5	4.9	3	4.5	2.3
<b>Self-protection and Family</b>						
Wash your hands regularly	80.4	81.8	78.1	82.8	78.3	82.5
Cover your mouth when coughing	42.3	44.1	39.6	42.4	37.4	47.4
Avoid close contact with anyone	36.1	37.8	33.4	34.8	35	37.3
Eliminate standing water	0.3	0.2	0.5	0	0.2	0.4
Cook meat and eggs well	0	0	0	0	0	0
Avoid unprotected direct contact	0.7	0.8	0.5	1	0.6	0.8
Don't know	3	3.1	2.7	1	4	1.9

### Annex 3: Community: barriers and challenges due to COVID-19

	Overall	18-59 Years	60+ Years	PwD	Sex: M	Sex: F
<b>Accessing food/supplement for children</b>						
<b>Accessibility Barrier</b>						
Movement restrictions	26.7	29	23	27.8	23.6	29.8
Social discrimination hindering	4.4	3.8	5.4	7.6	4	4.8
Family budget is insufficient	37	38.9	34	27.8	37.8	36.2
Price fluctuations	64.8	67.3	60.9	62.6	62.6	67.1
<b>Availability Barrier</b>						
Stock of these products available	4.2	5.7	2	4	3	5.4
Distribution challenge within area	5.5	5	6.4	1	5.9	5.2
<b>Lack of safety standards for the products</b>	0.7	0.8	0.5	0.5	0.2	1.2
<b>Other</b>	24.1	22.9	25.9	25.8	24.4	23.8