



TRANSPARENCY INTERNATIONAL UGANDA

REPORT ON THE EQUITABLE AND TRANSPARENT ACCESS OF COVID-19 VACCINES IN SIX SELECTED DISTRICTS IN UGANDA

Citizen's experience in acquisition of the COVID-19 vaccines in 2022

November
2022

Made Possible with
A Grant from The Swedish Ministry of Foreign Affairs

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3 ACRONYMS AND ABBREVIATIONS

CSO	Civil Society Organisations
DHO	District Health Officer
DHE	District Health Educator
MoH'	Ministry of Health
MoFPED	Ministry of Finance, Planning and Economic Development
NGO	Non-Governmental Organization
NOHP	National One Health Platform
S/C	Sub County
SPSS	Statistical Package for Social Sciences
TI	Transparency International
TIU	Transparency International Uganda
TOR	Terms of Reference
WHO	World Health Organisation

4 ABSTRACT

Vaccination towards Corona Virus Disease (COVID-19) has been recommended and adopted as one of the measures of reducing the spread of this novel disease worldwide. Despite this, vaccine uptake among the Ugandan population has been low with reasons surrounding this being unknown¹. In Uganda as at 8th October 2022, a total of 25,783,131 vaccine doses had been administered and 169,568 COVID-19 cumulative cases were confirmed with 3,630 cumulative deaths² recorded on 18th November 2022 as per the World Health Organisation (WHO) Health Emergency Dashboard. In July 2022, Transparency International Uganda conducted a survey on Equitable and Transparent Access of COVID-19 vaccines in six Districts in Uganda (Soroti, Lira, Hoima, Mubende, Kabale and Masaka) with a total of 11,587 vaccinated and non-vaccinated respondents.

The survey was aimed at producing evidence-based data and analysis on equitable and transparent access of the COVID-19 vaccines in 2022. To achieve this, interviews were conducted to gather data from both the vaccinated and non-vaccinated individuals on their experiences while obtaining the vaccine or attempting to obtain the vaccine.

COVID-19 vaccine inequity places the health of the Uganda's population at risk and exacerbates socio-economic repercussions in different parts of the country. Although the government has deployed different strategies to ensure that the COVID-19 vaccination is conducted in a transparent and equitable manner, the survey found out that; inadequate communication and outreach campaigns on COVID-19 vaccination and bribery cases mainly stemming from wanting the proof of vaccination and not the vaccine which costs varied depending on the socio-demographics of the respondents.

Additionally, the data from the survey through a regression analysis unveiled likelihoods of bribery to include; Male respondents are found to be 15% more likely to resort to corruption when accessing the vaccine; The oldest age segment of 51 years and above is the most likely to engage in vaccine corruption; and the results showed that retired respondents appear to be 49% more likely to bribe. Along the same lines, likelihoods of inequity and vaccine hesitancy were also unearthed to include; the likelihood for difficulty to access vaccines goes down the lower one's education level is; the higher earnings levels are significant predictors of ease of access to the COVID-19 vaccine; Those identifying as male are less likely to experience difficulties in accessing the COVID-19 vaccine, by 13%, compared to females.

The survey recommends that Government should strengthen the One Health Approach as a collaborative effort of multiple disciplines to attain optimal health for everyone; Multi-sectoral approach towards management of epidemics and pandemics so that everyone is brought on board; MOH should constantly monitor the trends of vaccine hesitancy and address emerging issues as they arise and there is a need for the MOH to work hand in hand with the Ministry of ICT to expand the ICT infrastructure across the country. This will address the challenges like accessing vaccination certificates experienced during the COVID-19 vaccination.

¹ <https://pubmed.ncbi.nlm.nih.gov/36061966/>

² <https://covid19.who.int/region/afro/country/ug>

5 BACKGROUND OF THE SURVEY

Uganda just like many countries around the world continues to implement measures in a bid to curb the spread of the COVID 19 and to ensure that the population's social and economic life normalises as was pre COVID 19 pandemic. The measures include; encouraging the populace to get fully vaccinated and also take up booster doses, installing hand washing facilities in most of the public places, as well as conducting COVID –19 vaccination outreaches. Vaccination was adjusted to include persons aged 12 years and above from the earlier age of 18 years. According to the World Health Organisation (WHO) Health Emergency Dashboard, on of 8th October 2022, a total of 25,783,131 vaccine doses had been administered.

TI-Uganda, in partnership with Transparency International's Global Health Programme, has been implementing a program titled "Enhancing Equitable Access of COVID-19 vaccine" funded by the Swedish Ministry of Foreign Affairs (SMFA). The long-term goal of the project is to ensure that the delivery of COVID-19 vaccines is conducted in an equitable and transparent manner. This means in practice: Ensuring that vulnerable groups are given equitable access to the vaccine, and that corruption is not prohibiting access to the vaccine at any part of the supply chain.

In January 2022, TI-Uganda published a report on equitable and transparent distribution of COVID-19 vaccines in 10 districts in Uganda. This was based on citizen's experience in the acquisition of the COVID-19 vaccines gathered through interviews with 11,880 vaccinated and non-vaccinated respondents. The data was collected between November –December 2021. The report offered an insight into citizen's experience in accessing the COVID-19 vaccines in 2021 with regards to equity and transparency. Most significantly, the survey found that 9.3% of the respondents reported to have paid a bribe in order to access the vaccines. Additionally, there was a large difference in vaccination rates within age groups with the majority of the vaccinated individuals ranging between 36-50 years, whilst those in the age brackets of 18-25 years and over 51 years were significantly less keen on getting vaccinated. Lastly, misinformation and limited access to information was directly linked to lower vaccination rates amongst the respondents.

In July and August 2022, TI-Uganda conducted an iteration of the survey on the effectiveness of COVID-19 vaccine supply chain and delivery mechanisms where a sample size of 11,587 respondents aged 18 years and above within 6 districts, The survey questionnaires were administered to respondents that had acquired at least one vaccine in 2022 and non-vaccinated respondents so as to capture their experiences in the year 2022.

6 OBJECTIVES OF THE SURVEY

In an effort to assess how access to the COVID-19 vaccine has changed over the past year, i.e., since the 2021 survey was undertaken, TI-Uganda conducted an iteration of the survey in 2022,

with the same overall objective of uncovering how equitable and transparent access to the COVID-19 vaccine is in Uganda with reference to six sampled districts.

The survey aimed at:

- Producing evidence-based data and analysis on equitable and transparent access of the COVID-19 vaccine.
- Documenting the experience of both the vaccinated and non-vaccinated individuals with acquiring and not acquiring the vaccine.
- Describing the operating environment as perceived and experienced by the respondents and draw conclusions on the effectiveness of vaccine supply chains.

7 METHODOLOGY

A sample size of 11,587 respondent adults, 18 years and above, were interviewed. The interviews were conducted in 6 districts over a period of two months (July-August 2022). These were conducted at household level using systematic random sampling to identify the households and within each household, the lottery method was used to identify the respondent.

- The data was collected by the Village Health Teams (VHT) who were identified with support from the District Health Officers and District Health Educators. At least one data collector (VHT) was selected from each sub-county in each project district so that each sub-county in the district was represented.
- Face-to-face interviews were conducted in the language of the respondent's choice.
- A standardized, paper-based questionnaire was used across all districts to ensure comparability across districts.
- The survey tool was administered to both vaccinated and non-vaccinated respondents.
- Statistical Package for Social Sciences (SPSS), a computer software package was used for analysing quantitative data.
- The quantitative data was analysed through frequency counts, percentages used to determine the socio-demographic characteristics of respondents, mean and median were used to establish the level of corruption and equity in COVID-19 vaccine distribution and accessibility; associations between the variables was established through regression analysis and chi-square.
- Tables and relevant figures were generated to present the information on the key program areas and achievements.

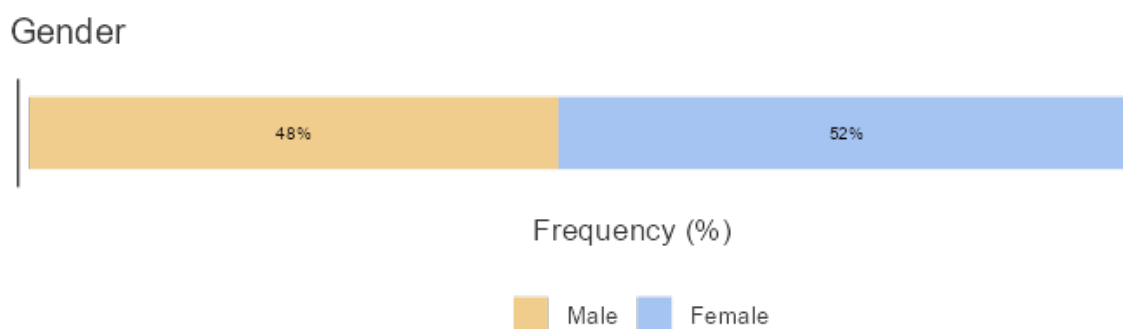
8 . PRESENTATION AND DISCUSSION OF SURVEY FINDINGS

8.1 Socio-demographic characteristics of respondents

This section covered socio-demographic characteristics of the respondents, including gender, district of residence, education level, income status, living situations, work status, monthly income, residential area, and the COVID-19 vaccine status. This section was analyzed using descriptive statistics frequencies and percentages to be able to make a conclusion. The findings are presented below.

8.1.1 Gender Distribution of Respondents

Figure 1. Gender Distribution of Respondents



The results in Figure one indicates that of the 11,587 survey respondents, 52% of the respondents were female while the remaining 48% of the respondents were male. This suggests that with minimal margin, majority of the respondents in this survey were female.

8.1.2 Vaccination status of Respondents

Figure 2. Vaccination Status of Respondents

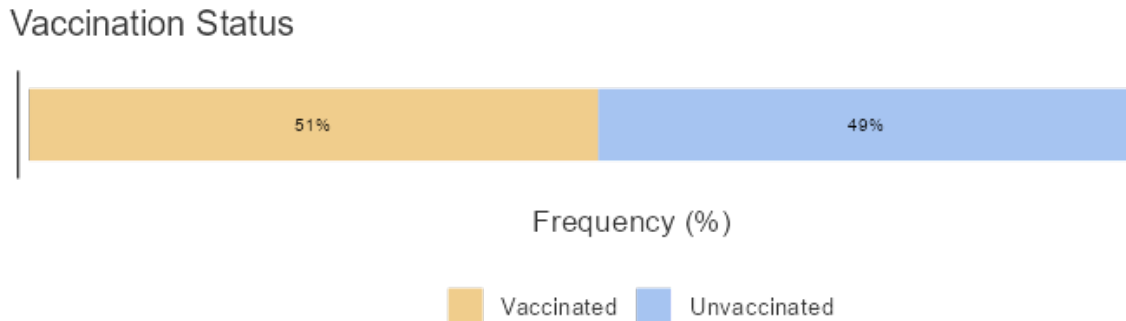


Figure 3. Vaccination Status of Respondents by Gender

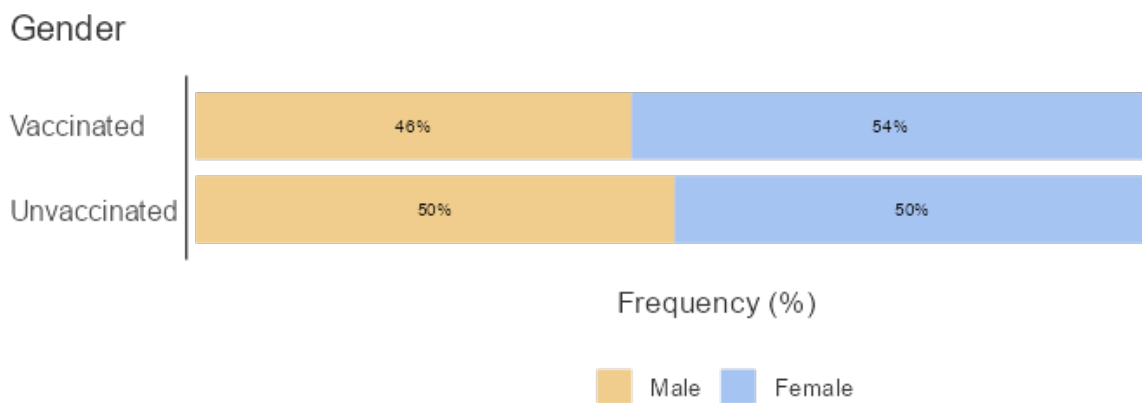
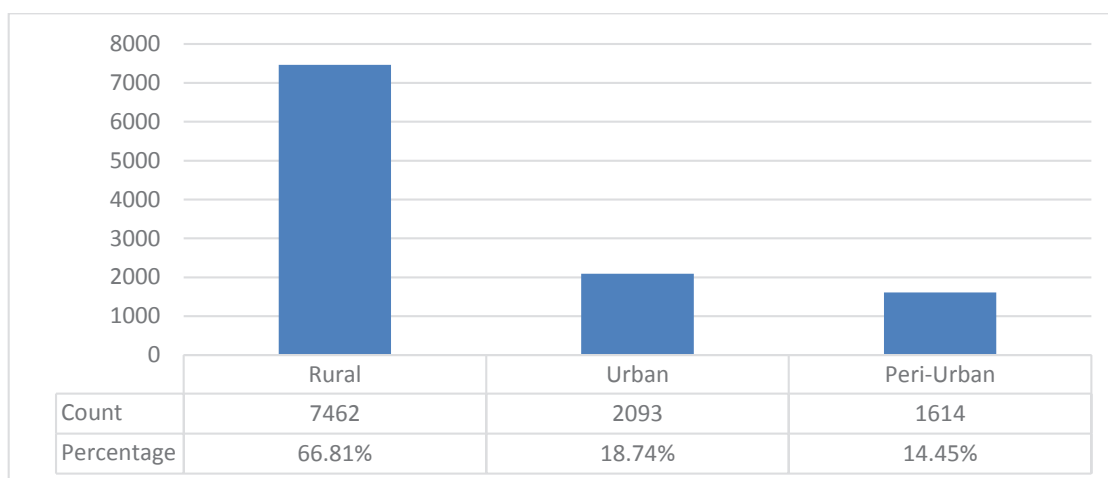


Figure 2 shows that out of the 11,587 respondents who participated in this survey, 51% of them were vaccinated while 49% of the respondents had not been vaccinated. This was important in this survey because it helped in identifying factors that rendered some of the respondents hesitant to get COVID-19 vaccine and those that encouraged them to consider getting vaccinated. Figure 3 shows that females were more likely to get vaccinated than their male counterparts.

8.1.3 Distribution of respondents by area of residence.

Figure 4. Resident Areas



For this survey, urban areas were cities, peri-urban areas were trading centres while the rural areas were villages where the surveys were conducted. TI-Uganda intentionally selected at least one data collector (Village Health Teams) from each sub county in each sample district so as to have a representation from the entire district. Figure 4 shows the distribution of survey respondents according to the living area, which focused strongly on the rural population and a lower share of urban and peri-urban populations.

8.1.4 Distribution of respondents by district

Figure 5. Distribution of respondents by district

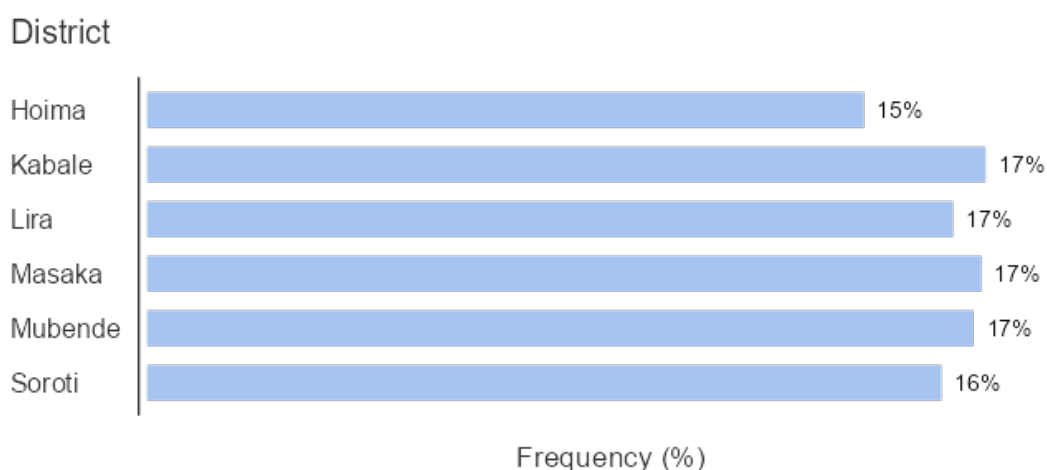


Figure 5 shows the distribution of respondents according to the target districts, which indicates that the distribution was very even across them. Specifically, 1,725 (14.9%) of the respondents were from Hoima (Western region), 2,017 (17.41%) of the respondents were from Kabale (Western region), 1,939 (16.73%) of the respondents were from Lira (Northern region), 2,007 (17.32%) of the respondents were from Masaka (Central region), 1,988 (17.16%) of the respondents were from Mubende (central region), and the remaining 1,911 (16.49%) of the respondents were from Soroti (Eastern region). Hence, all four regions of Uganda were represented in the survey.

8.1.5 Distribution of respondents according to main source of news on COVID-19 and gender.

Table 1: Distribution of respondents according to main source of news on COVID-19 and Gender

Source of news on Covid-19	Gender		Total
	Male	Female	
Facebook or other social media	381	299	680
TV news	938	954	1892
Radio	3106	3385	6491
Online media	139	125	264
Printed newspapers and magazines	70	105	175
Word of mouth / verbal	867	1137	2004
NO Response/No Specified	33	48	81
Total	5534	6053	11,587

Radio and TV news form the major source of information for both male and female respondents with coverage of 6491 and 1892 people who participated in this survey. Facebook or other social media were the least used sources of information.

8.1.6 Distribution of Respondents by District and Work Status

Table 2: Distribution of Respondents by District and Work status

Working Status	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
Working full-time	323	524	306	317	505	181	2156

Working Status	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
	18.9 %	26.2 %	16.1 %	16.1 %	26.6 %	10.3 %	19.2 %
Not working and looking for work	289	611	280	452	528	80	2240
	16.9 %	30.6 %	14.8 %	22.9 %	27.8 %	4.5 %	19.9 %
Not working and not seeking work	177	107	218	124	189	161	976
	10.4 %	5.4 %	11.5 %	6.3 %	9.9 %	9.1 %	8.7 %
Retired	77	66	73	71	73	86	446
	4.5 %	3.3 %	3.9 %	3.6 %	3.8 %	4.9 %	4.0 %
Student	72	155	122	78	204	228	859
	4.2 %	7.8 %	6.4 %	4.0 %	10.7 %	12.9 %	7.6 %
Homemaker	139	268	193	156	117	296	1169
	8.1 %	13.4 %	10.2 %	7.9 %	6.2 %	16.8 %	10.4 %
Business	336	129	467	528	132	499	2091
	19.7 %	6.5 %	24.6 %	26.8 %	6.9 %	28.3 %	18.6 %
Total	1708	1999	1895	1970	1902	1762	1123
	100 %	100 %	100 %	100 %	100 %	100 %	100 %

The results in Table 2 indicate that Kabale and Mubende had the largest number of respondents working full or part-time, while Masaka, Soroti and Lira districts championed the number of respondents as homemakers. Hoima had the largest share of unemployed respondents at the time of this survey.

8.1.7 Education-Based Distribution of respondents by District

Table 3: Education-Based Distribution of respondents by District

Contingency Tables

Education	District						
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	Total
No formal education	77 4.5%	210 10.5%	114 5.9%	154 7.8%	94 4.8%	98 5.4%	747 6.6%
Informal schooling only	84 4.9%	105 5.3%	102 5.3%	78 3.9%	102 5.2%	106 5.8%	577 5.1%
Some primary schooling	328 19.2%	298 14.9%	351 18.3%	348 17.6%	397 20.2%	366 20.2%	2088 18.3%
Primary school completed	349 20.4%	449 22.4%	401 20.9%	367 18.5%	366 18.6%	253 13.9%	2185 19.2%
Some secondary schooling	374 21.9%	403 20.2%	466 24.2%	508 25.7%	496 25.3%	458 25.2%	2705 23.8%
Secondary school completed	256 15.0%	233 11.7%	255 13.3%	266 13.4%	265 13.5%	248 13.7%	1523 13.4%
Some higher secondary /equivalent	82 4.8%	107 5.3%	114 5.9%	93 4.7%	117 6.0%	82 4.5%	595 5.2%

Contingency Tables

Education	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
Higher secondary/equivalent completed	68	94	76	70	64	105	477
	4.0%	4.7%	4.0%	3.5%	3.3%	5.8%	4.2%
Some education at bachelor/equivalent level	45	77	29	73	35	68	327
	2.6%	3.9%	1.5%	3.7%	1.8%	3.7%	2.9%
Bachelor/equivalent Degree completed	38	22	13	22	27	25	147
	2.2%	1.1%	0.7%	1.1%	1.4%	1.4%	1.3%
Masters/equivalent degree or above	9	2	1	0	1	5	18
	0.5%	0.1%	0.1%	0.0%	0.1%	0.3%	0.2%
Total	1710	2000	1922	1979	1964	1814	11389
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Results in Table 3 demonstrate that half of the respondents had either no formal education or had stopped at primary education, while around half either had some secondary education or completed it. Only 4.25% of the respondents had gone past secondary education level.

8.1.8 Living Situation-Based Distribution of respondents by District

Table 4: Living Situation-Based Distribution of respondents by District

Contingency Tables

Living Situation	District						
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	Total
Homeless	46 2.8%	20 1.0%	33 1.7%	88 4.6%	53 2.9%	10 0.6%	250 2.3%
Living in an informal settlement	118 7.1%	218 11.0%	372 19.7%	80 4.1%	104 5.6%	50 2.9%	942 8.5%
Living in a displaced people's settlement	79 4.7%	15 0.8%	45 2.4%	108 5.6%	56 3.0%	106 6.1%	409 3.7%
Living in shared accommodation	272 16.3%	615 31.1%	361 19.1%	391 20.2%	322 17.4%	241 13.8%	2202 19.9%
Living in a private or rented home	1152 69.1%	1110 56.1%	1079 57.1%	1265 65.4%	1319 71.1%	1336 76.6%	7261 65.6%
Refused to answer	0 0.0%	0 0.0%	0 0.0%	1 0.1%	0 0.0%	0 0.0%	1 0.0%
Doesn't know	0 0.0%	0 0.0%	0 0.0%	1 0.1%	0 0.0%	0 0.0%	1 0.0%
Total	1667	1978	1890	1934	1854	1743	11066

Contingency Tables

Living Situation	District						
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	Total
	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Table 4 indicates that the majority of respondent 65.6% live in private or rented homes. Of the 409 respondents living in IDP settlements, 6.1% of them were from Soroti, and there were more homeless respondents from Masaka at 4.6% than any of the districts selected for this survey.

8.1.9 Monthly Income-Based Distribution of respondents by District

Table 5: Monthly Income-Based Distribution of respondents by District

Contingency Tables

Income	District						
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	Total
You can't buy at all what you would need	83	290	162	108	143	97	883
	4.9 %	15.3 %	8.7 %	5.8 %	7.6 %	5.9 %	8.2 %
You need to borrow or spend savings to buy things you need	262	191	390	234	165	415	1657

Contingency Tables

Income	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
You can manage with difficulties	15.6 %	10.1 %	21.1 %	12.6 %	8.8 %	25.0 %	15.3 %
	722	775	582	766	924	821	4590
You have just enough to buy what is needed	43.0 %	41.0 %	31.4 %	41.1 %	49.3 %	49.5 %	42.4 %
	436	565	523	460	487	265	2736
You have enough to buy what you want	26.0 %	29.9 %	28.2 %	24.7 %	26.0 %	16.0 %	25.3 %
	175	71	195	296	155	60	952
Total	10.4 %	3.8 %	10.5 %	15.9 %	8.3 %	3.6 %	8.8 %
	1678	1892	1852	1864	1874	1658	10818
	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Results in Table 5 note that the income of up to 42.4% of the participants can enable them to manage their needs with difficulties; the income of 25.3% of them was just enough to enable them buy what they needed. The share of respondents who still needed to borrow or spend savings to buy things they needed by the time of this survey was 15.3%. Only 8.8% indicated that they have enough to buy what they want. This suggests that people of different income levels participated in this survey.

8.1.10 Distribution of Respondents Based on the Monthly Amount of Money Earned or Received by District

Table 6: Distribution of Respondents Based on the Monthly Amount of Money Earned or Received by District

Contingency Tables

Monthly earnings	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
Below 81,900 UGX	51.4%	56.0%	50.7%	50.4%	47.8%	61.9%	52.9%
82,000 - 90,000 UGX	14.0%	14.3%	17.5%	20.0%	14.8%	18.0%	16.5%
90,000 - 98,000 UGX	10.5%	9.3%	9.1%	10.9%	9.7%	9.0%	9.7%
98,000 - 107,000 UGX	8.3%	9.9%	10.6%	10.5%	11.7%	5.8%	9.5%
Above 107,000 UGX	15.8%	10.6%	12.0%	8.2%	15.9%	5.3%	11.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Considering the monthly amount of money earned by respondents, results in Table 6 show that for a large share of respondents (52.9%) monthly incomes are below 81,900 UGX, which is the equivalent of the international poverty line of 2.15\$ per day. Soroti district has the highest number (61.9%) of respondents with their monthly income below 81,900 UGX. Only about 11.3% earn or receive more than 107,000 UGX with most of them coming from Mubende and Hoima.

8.2 Type of Health Facility where Respondents received the COVID-19 Vaccines.

In this section, respondents shared about the type of facility they obtained the vaccines from. The findings regarding these are presented in the following tables.

8.2.1 Distribution of respondents based on Kinds of Health Centres Respondents Received their COVID-19 Vaccine by district.

Table 7: Distribution of respondents based on Kinds of Health Centres Respondents Received their COVID-19 Vaccine by district.

	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
Public	881 93.6%	944 95.4%	857 90.2%	688 71.6%	978 97.7%	872 96.7%	5220 90.9%
Private	28 3.0%	31 3.1%	65 6.8%	164 17.1%	16 1.6%	13 1.4%	317 5.5%
Both	32 3.4%	15 1.5%	28 2.9%	109 11.3%	7 0.7%	17 1.9%	208 3.6%
Total	941 100.0%	990 100.0%	950 100.0%	961 100.0%	1001 100.0%	902 100.0%	5745 100.0%

Results in Table 8 indicate 90.9% of the vaccinated respondents received their COVID-19 vaccines from public health facilities, 5.5% got them from the private health facilities and the remaining 3.6% received their vaccines from both public and private health facilities. The vaccines at the public health facility were free of charge, while clients of private facilities had to pay for the vaccines, which however does not constitute corruption. The price of vaccines was set at Ush20,000 (\$5.52) as overhead costs for the vaccines³.

³ <https://www.theeastafrican.co.ke/tea/science-health/uganda-allows-private-hospitals-to-charge-for-covid-vaccines-3814170>

8.3 Cases of Bribery among Respondents in Public Health Facilities Accessing COVID-19 Vaccines

This part of the survey determined how often bribery cases, i.e. informal payments, gifts or favours offered in exchange for access to the COVID-19 vaccines occurred among the vaccinated respondents.

8.3.1 Occurrence of bribery to access COVID-19 Vaccine in Public Health Facility by District

Table 8: Occurrence of bribery to access COVID-19 Vaccine in Public Health Facility by District

Contingency Tables

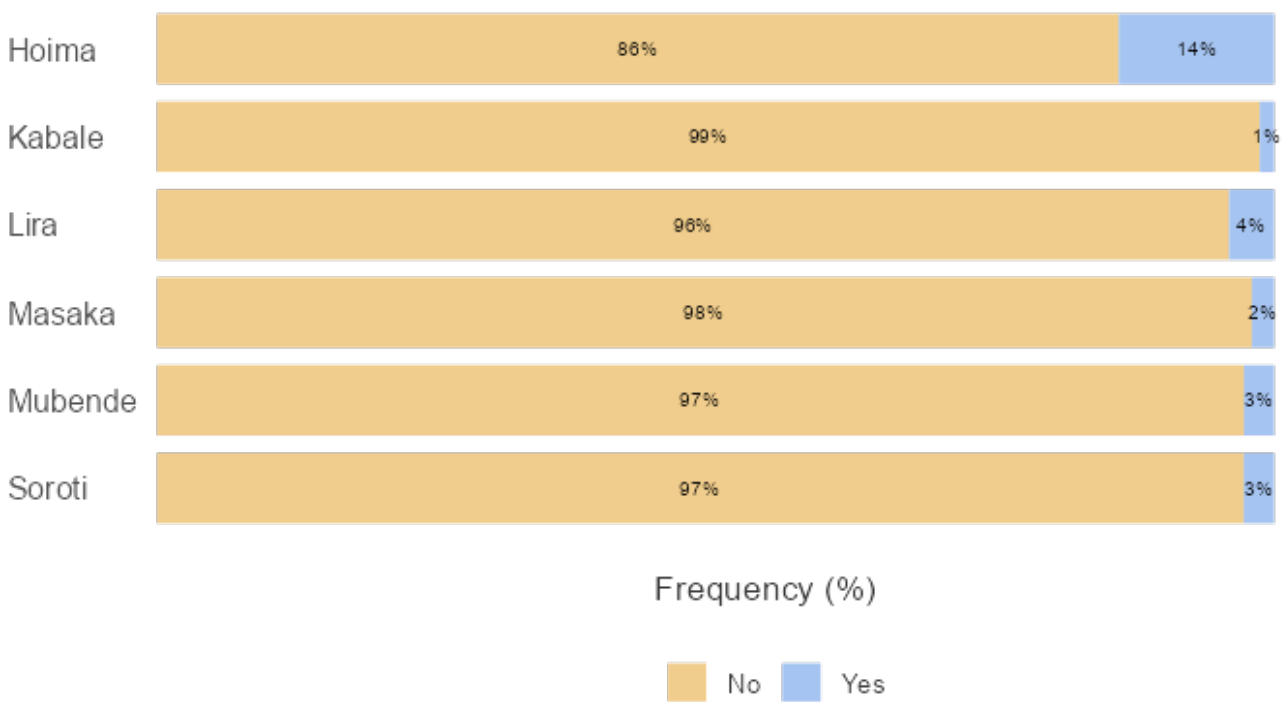
Pay Gift or Favour for Vaccine	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
Pay for the vaccine	24	3	11	9	5	13	65
	3.0%	0.3%	1.3%	1.1%	0.5%	1.5%	1.2%
Give a gift for the vaccine	15	2	10	5	4	2	38
	1.9%	0.2%	1.2%	0.6%	0.4%	0.2%	0.7%
Do a favour for the vaccine	71	7	13	3	17	9	120
	9.0%	0.7%	1.5%	0.4%	1.8%	1.0%	2.3%
No	681	922	810	838	934	857	5042

Contingency Tables

Pay Gift or Favour for Vaccine	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
	86.1 %	98.7 %	96.0 %	98.0 %	97.3 %	97.3 %	95.8 %
Total	791	934	844	855	960	881	5265
	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Figure 6. Distribution of respondents based on vaccine bribery by district

Paid a Bribe for Vaccine



Interestingly, the levels of vaccine bribery are similar across all districts with 1-4% except for Hoima where it amounts to 14%.

8.3.2 Total Monetary Value of Bribery Exchange to Access COVID-19 Vaccines in Public Facility by Gender (in UGX)

Table 9: Total Monetary Value of Bribery Exchange to Access COVID-19 Vaccines in Public Facility by Gender (in UGX)

Descriptive			Gender	N	Mean	Median	Minimum	Maximum
Value of Bribe For Vaccine (in UGX)		Male	27	17574	7000	1500	90000	
		Female	31	15032	10000	1000	100000	

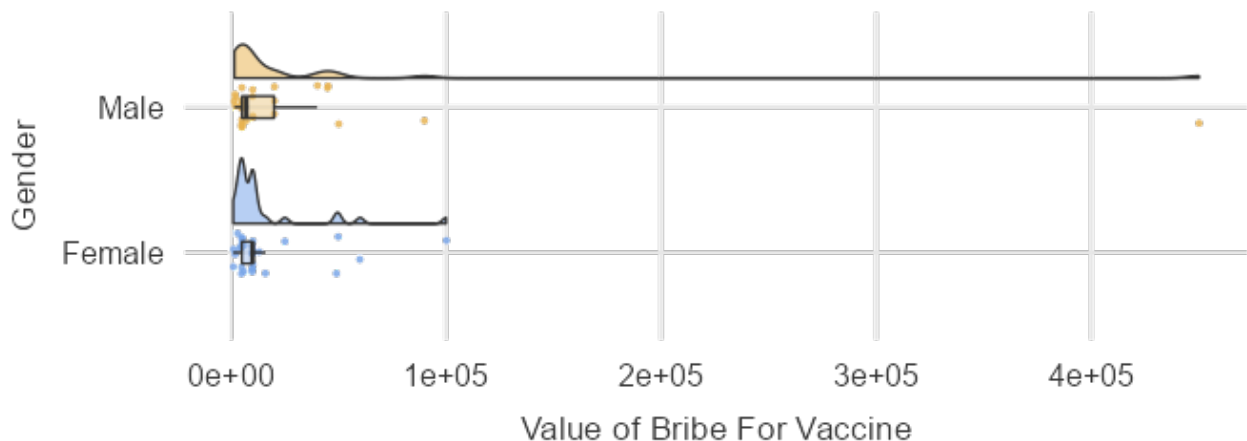
Interestingly, the average bribe paid is double for male respondents compared to the female ones, however this might be due to individual large payments, as the median for men is actually lower than for women.

Table 10: Total Monetary Value of Bribery Exchange to Access COVID-19 Vaccines in Public Facility by District (in UGX)

Descriptives			District	N	Mean	Median	Minimum	Maximum
Value of Bribe For Vaccine (in UGX)		Hoima	14	36429	32500	5000	100000	
		Kabale	1	5000	5000	5000	5000	
		Lira	9	9333	10000	4000	20000	
		Masaka	8	23125	7500	5000	100000	
		Mubende	10	9500	5000	1000	49000	
		Soroti	17	9500	5000	1500	50000	

The value of the bribe for the vaccine differs by districts, being significantly higher in Hoima with an average of 36,429UGX, although that is probably due to a few individual large bribes. Masaka also showed a high mean bribe value of 23,125UGX, while the remaining four districts average around 5000-9000UGX.

Value of Bribe For Vaccine



8.3.3 The likelihood to engage in vaccine bribery according to socio-demographic factors (regression analysis):

When assessing whether the socio-demographic factors like gender, location, education, and work status explain the variance in levels of bribery for the vaccine, our regression model finds that only 5-18% of the variance can be explained by these socio-demographic factors. This indicates that corruption and the decision or need to bribe are extremely complex social phenomena which are hardly attributable to specific socio-demographic factors. Nonetheless, we found a number of factors to be associated with a higher likelihood of engaging in corruption.

Using regression analysis to analyse the statistical relationship between socio-demographic factors and the likelihood to engage in bribery for COVID-19 vaccines reveals the following;

Based on the survey data, we could not establish a statistically significant effect of the type of living area (urban/peri-urban/rural) on corruption likelihood in relation to the COVID-19 vaccine. However, there is a statistically significant relationship between respondents' gender, age, education, employment status, location, as well as income and the likelihood to engage in corrupt acts (bribery, giving a gift, doing a favour) in the context of the COVID-19 vaccine.

Male respondents are found to be 15% more likely to resort to corruption when accessing the vaccine.

Also, the oldest age segment of 51 years and above is the most likely to engage in vaccine corruption, while the younger age groups are less likely to do so compared to the elderly. This may be linked to the higher urgency for elder generations to be vaccinated as the COVID-19 virus affected them more.

Along similar lines, the results show that retired respondents appear to be 49% more likely to bribe, while unemployed are 44% less likely to do so, which is likely linked to the lack of resources this group would dedicate to receiving the vaccine.

Regarding the relationship between education levels and corruption, the results indicate that those with secondary education are 45% less likely to engage in corruption than those with informal or no education. This potentially indicates the lack of information experienced by under educated groups on what constitutes corruption and its negative effects.

Furthermore, household income appears to have a strong effect on corruption likelihood in relation to the COVID-19 vaccine. Those who stated that their household income is sufficient to buy what they want are most likely to engage in corruption (1.9 times higher) compared to those who state that they cannot buy at all what they would need.

Similarly, respondents' earnings (having removed respondents who are retired or dependents) appear to have an effect on the likelihood of engaging in corruption for the COVID-19 vaccine. Moving up from the lowest band of earning to the second level increases the likelihood of engaging in a corrupt act by 52%. However, interestingly, those in the highest band of earning are 40% less likely to bribe, which might be linked to higher education levels preventing them from engaging in corruption despite the availability of resources.

In addition, there is a statistically significant difference in corruption depending on whether respondents felt that the Ministry of Health communication and outreach campaign motivated them to get the COVID-19 vaccine or not. The former group is 32% more likely to engage in corruption for the vaccine than the latter.

At the same time, those who experienced the access to the vaccine to be easy were 45% less likely to engage in corrupt acts, while those who experienced it as difficult were 79% more likely to do so.

The geographic location of respondents appears to be a strong predictor of bribery for vaccines. Overall, the location by district has a statistically significant effect on bribery rates. While Hoima sees the highest rates, being in a district that is not Hoima makes it between 92% to 74% less likely to engage in bribery for vaccines. The location by sub-county is an even stronger predictor as it explains up to 41.7% of variance of the bribery distribution.

In summary, an elderly male of lower education living in Hoima, who is retired and has a sufficient income and got motivated by the MoH vaccine campaign will be most likely to engage in bribery to access the COVID-19 vaccine compared to his counterparts across the mentioned socio-demographic dimensions.

In terms of the types of bribes given in the context of the COVID-19 vaccine, the survey results show that different groups of people prefer to give different types of bribes. Those with lower education are more likely to give gifts and do favours, compared to paying a monetary bribe; and vice-versa. As education increases, so does the likelihood that there is a monetary payment compared to a gift or favour.

8.3.4 Reasons for vaccine bribery

Table 11: Reasons for paying to access the vaccine

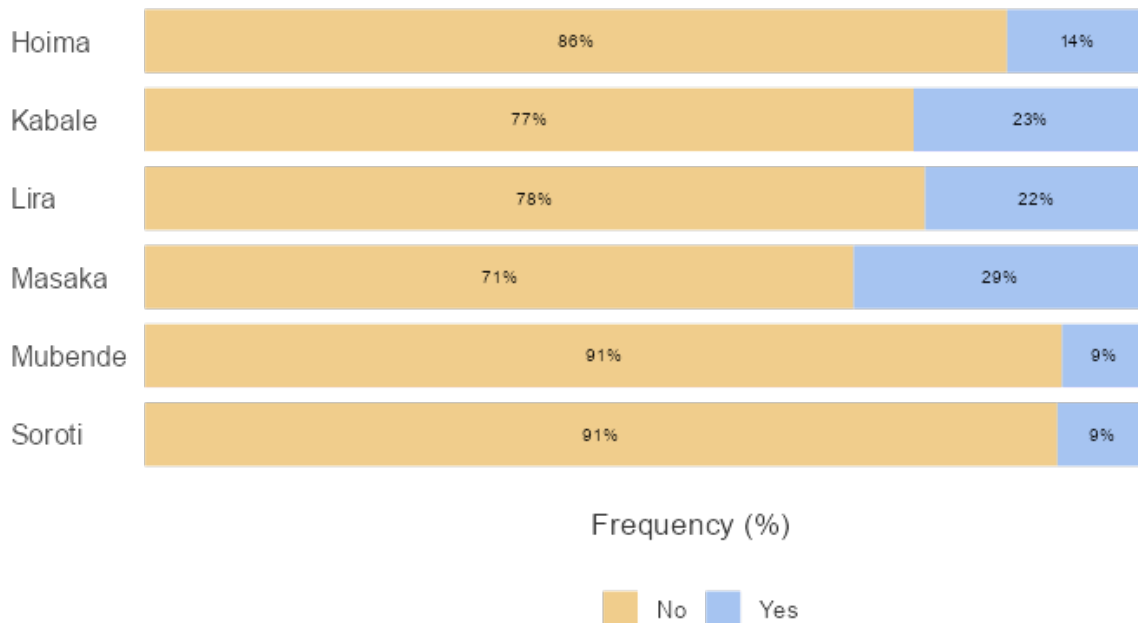
REASONS FOR PAYING TO ACCESS THE VACCINE	Counts	% of Total	Cumulative %
LONG QUEUE	93	26 %	26 %
WANTED THE VACCINE CARD	76	21 %	47 %
HEALTH WORKER SOLICITED	38	11 %	58 %
WANTED TO CHOOSE VACCINE TYPE	150	42 %	100.0 %

It should be noted that respondents offered bribes to access COVID-19 vaccines in public health facilities for different reasons. Most commonly, they wanted or needed to obtain a certain type of vaccine (47%); others wanted to avoid the long queue (26%); some of them wanted the card without being vaccinated (21%); health workers asked them for the payment (11%).

8.3.5 Whether Personal Connections were used in order to receive a better vaccination service

Figure 7. Whether personal connections were used in order to receive a better vaccination service

Were Personal Connections Used to Access Vaccine



The survey indicates that it is quite common in some districts to use personal connections to access the vaccine, up to 22-29% in Kabale, Lira and Masaka, with the latter having the highest share. Using personal connections to obtain better vaccination services was lowly registered from Soroti and Mubende districts.

8.3.6 The likelihood of using personal connections according to socio-demographic factors.

Female respondents are less likely to use personal connections in accessing the COVID-19 vaccine, 15% less likely than those identifying as male to be precise.

The older population appears to be more inclined to use personal connections in accessing the vaccine.

At the same time, the rural population is less likely to use personal connections than urban, by 20% – potentially due to the fact that the urban population is more connected to relevant individuals working that could facilitate vaccine access.

The same may go for education, as having completed higher education is statistically significant related to using personal connections for accessing the vaccine, with a 47% higher likelihood compared to those without formal education.

Similarly, districts are strong predictors of the likelihood to use personal connections in accessing vaccine.

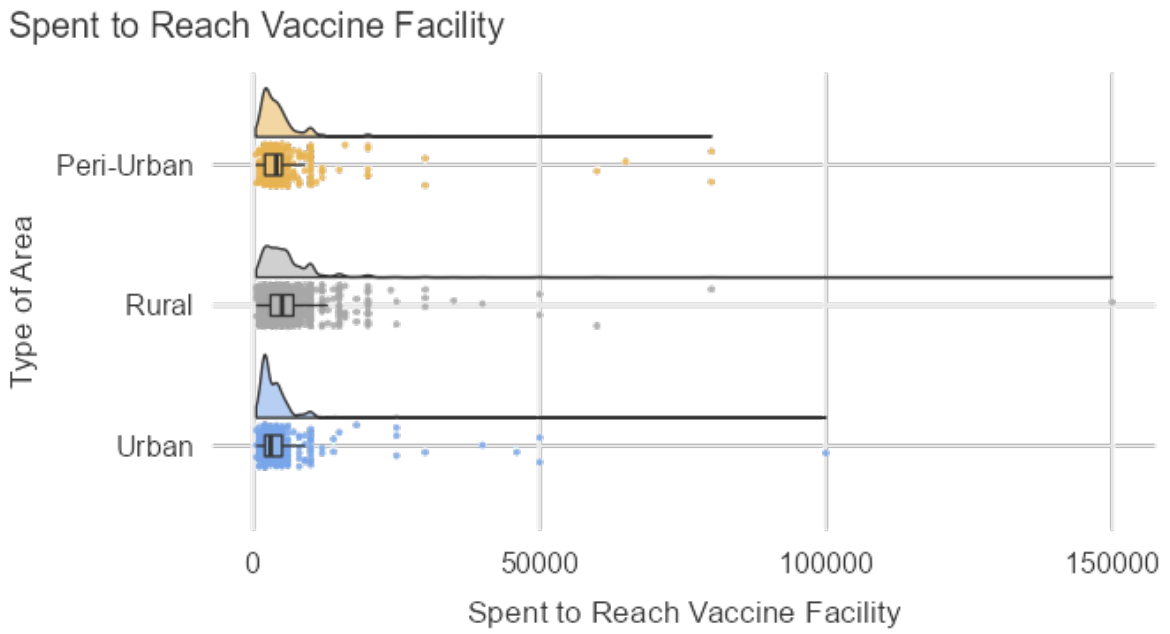
In summary, an elderly male of higher education, living in an urban area will be most likely to use personal connection to access the COVID-19 vaccine compared to his counterparts across the mentioned socio-demographic dimensions.

8.3.7 Total Monetary Value spent to Reach Vaccination Facility by Residential Areas (in UGX)

Table 12: Total Monetary Value spent to Reach Vaccination Facility by Residential Areas (in UGX)

	Type of Area	N	Mean	Median	Minimum	Maximum
Money Spent to Reach Vaccine Facility (in UGX)	Peri-Urban	326	5314	4000	400	80000
	Rural	1210	5918	5000	500	150000
	Urban	377	4570	3000	500	100000

Figure 8: Total Monetary Value spent to Reach Vaccination Facility by Residential Areas (in UGX)



The findings show that the rural population has had to spend 4 times as much money to access the COVID-19 vaccination public facility compared to urban and peri-urban populations.

8.4 Cases of Bribery in Public Health Facilities Generally in the Last Six Months

This section determines whether vaccinated respondents were subjected to cases of bribes in form of payments, gifts or favours to access any healthcare services in public health facilities in the last six months. The findings regarding these are presented in the following tables disaggregated by gender and district;

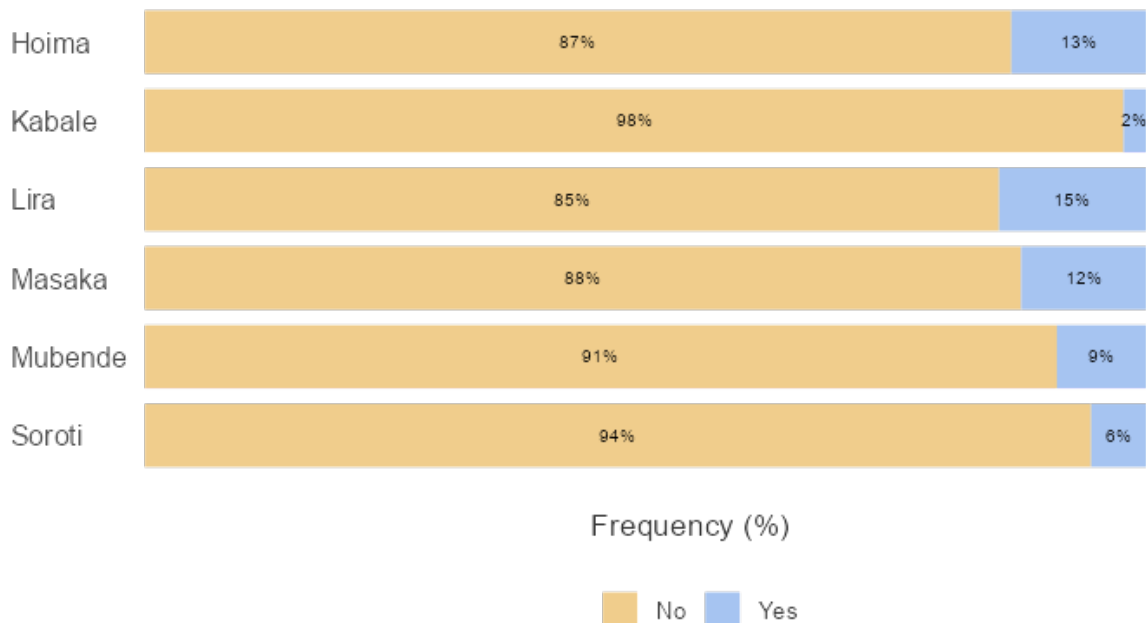
8.4.1 Whether respondents had paid a Bribe to Access Healthcare in a Public Facility in the Last 6 Months by Gender

Table 13: Whether respondents had paid a Bribes to Access Healthcare in a Public Facility in the Last 6 Months by Gender

In the last 6 months, have you paid, given a gift, or done a favour, to access healthcare in a public facility?	Gender		
	Male	Female	Total
No	4147	4555	8702
	90.7 %	90.6 %	90.7 %
Yes	427	470	897
	9.3 %	9.4 %	9.3 %
Total	4574	5025	9599
	100.0 %	100.0 %	100.0 %

Figure 8. Whether respondents had paid Bribes to Access Healthcare in a Public Facility in the Last 6 Months by District.

Given Bribe in Last 6 Months for Healthcare



Across all districts, an average of 10% of the respondents indicated to have either paid money, given a gift or done a favour to receive public healthcare. No noticeable gender differences were indicated, however, there were significant differences between the districts: Whilst Lira (15%), Hoima (13%) and Masaka (12%) show above-average bribery rates, the rates are relatively low in Kabale (2%) and Soroti (6%), and around average in Mubende (9%). Considering the number of times respondents paid in bribes, it was found out that out of the 353 respondents, 183 of them had paid a bribe once, 102 twice, 43 three times and the remaining 25 of the respondents had paid a bribe four times over the last 6 months.

8.4.2 Total Monetary Value of Exchange to Access Healthcare Services in Public Facility in the Last Six Months by Gender (in UGX)

Table 14: Total Monetary Value of Exchange to Access Healthcare Services in Public Facility in the Last Six Months by Gender (in UGX)

	Gender	N	Mean	Median	Minimum	Maximum
Total monetary value of bribes paid for access to public healthcare in last 6 months (in UGX)	Male	179	38154	20000	1000	450000

	Gender	N	Mean	Median	Minimum	Maximum
	Female	161	27248	10000	1000	650000

Considering the distribution of respondents based on their total monetary value of exchange to access healthcare services in public health facilities in the last six months by gender, the results in Table 17 demonstrate that the male gender offered more monetary value of exchange of healthcare services in public health facilities.

8.4.3 Total Monetary Value of Exchange to Access Healthcare Services in Public Facility in the Last Six Months by District (in UGX).

Table 15. Total Monetary Value of Exchange to Access Healthcare Services in Public Facility in the Last Six Months by District (in UGX).

Descriptives

	District	N	Mean	Median	Minimum	Maximum
Total Monetary Value of Exchange to Access Healthcare Services in Public Facility in the Last Six Months by District (in UGX)	Hoima	60	67750	32500	3000	650000
	Kabale	16	14281	10000	1500	75000
	Lira	122	33705	20000	1000	250000
	Masaka	40	20525	10000	2000	120000
	Mubende	41	17159	10000	1000	150000
	Soroti	64	21430	10000	1500	300000

On the total monetary value of exchange to access healthcare services in public health facility in the last six months by districts, the survey results in Table 18 shows that those from Hoima district paid the highest amount on average with 67750UGX.

8.4.4 Total Monetary Value of Exchange to Access Healthcare Services in Public Facility in the Last Six Months by Type of Residential Area (in UGX).

Table 16: Total Monetary Value of Bribe to Access Healthcare Services in Public Facility in the Last Six Months by Type of Residential Area (in UGX)

Descriptives

	Type of Area	N	Mean	Median	Minimum	Maximum
Value of bribe (in UGX)	Peri-Urban	60	34258	11250	2000	450000
	Rural	131	39603	10000	1000	650000
	Urban	141	25454	20000	1500	140000

Regarding the total monetary value exchanged to access healthcare services in public health facilities in the last six months by residential areas, the survey findings presented in Table 19 show that those from rural areas exchanged more money than their counterparts from urban and peri-urban. Those from rural areas exchanged a sum of 650,000 Uganda shillings representing 57.4% of the total sum exchanged. This could be explained if the majority of the rural population still relies on public health facilities for their healthcare services unlike those from urban and peri-urban who prefer private health facilities to public healthcare services.

8.4.5 The likelihood to engage in healthcare bribery according to socio-demographic factors:

Looking at general levels of bribery in public healthcare facilities over the 6 months preceding the survey, respondents' location by district is a significant predictor. Overall, 35% of the variation in healthcare bribery levels can be explained by sub-county location of respondents. In terms of districts, Lira appears to have the highest likelihood for corruption, while some of the districts (Kabale, Mubende, Soroti) appear to have a statistically significant lower likelihood (85%, 38%, and 63% respectively) for healthcare bribery than Lira or Hoima.

In general, the peri-urban population appears to be more likely to bribe than the urban, by 1.5 times, while the rural population is slightly less likely to have engaged in bribery for healthcare in the past 6 months.

Education appears to have only a partial effect on healthcare bribery levels, with secondary school and higher education levels being statistically significant predictors of lower bribery to levels compared to no formal education.

Respondents' earnings (while filtering out dependents and retired) is a statistically significant predictor for general bribery levels in healthcare for the past 6 months. The higher one's earnings, the lower the likelihood to engage in bribery for healthcare. This may seem counterintuitive but there are two potential explanations for this phenomenon: firstly, higher earnings often go hand in hand with higher education which often reduces people's inclination to bribery as they are aware of its unlawfulness and negative social consequences; secondly, those with higher earnings might avoid using the public health facilities altogether (due to perceived and/or experienced lower quality of service) and rely on private sector providers instead.

Furthermore, age is strongly related to general bribery levels for healthcare. The youngest are the least likely to bribe, while the likelihood goes up among the middle aged by 85-90%. This may be linked to the availability of resources increasing.

Respondents' work status also serves as a predictor for general bribery levels in healthcare in the past 6 months. Compared to the employed, the unemployed are 31% more likely to engage in bribery in healthcare, although they were less likely to use bribery for the vaccine. Potentially, this group will resort to bribery in urgent health issues but may not have perceived the vaccine to be worth bribing for. At the same time, the retired population appear to be less likely to engage in *general healthcare* bribery. As mentioned in the previous section, the retired were more likely to bribe for *vaccines* compared to other groups – this might be explained by the fact that COVID-19 was more fatal for the elder generation, hence they may have felt a stronger urgency to get vaccinated even at the price of a bribe, which they normally would not easily pay for healthcare services.

In summary, the following prototype will be most likely to engage in healthcare corruption compared to his counterparts across the various socio-demographic dimensions: a middle-aged person of lower education and with low earnings, unemployed, living in Lira in a peri-urban area.

8.4.6 The likelihood for choice of corruption types (pay a bribe/give a gift/do a favour) by socio-demographic factors:

Monthly earnings appear to have an effect on the likelihood of having paid a bribe (instead of giving a gift or doing a favour) in the last 6 months in return for healthcare services. For example,

moving from the lowest band to the second lowest increases the likelihood of having paid a bribe by 78%.

Having done a favour in return for healthcare services is most likely in Hoima, and least likely in Masaka. While having paid a bribe in return for healthcare services is most likely in Masaka, second most likely in Lira, then Hoima; least likely in Kabale. This is likely linked to the different socio-demographic composition of these districts.

Work status is related with having paid a bribe in the past 6 months for healthcare, with the retired being 82% less likely than the employed to do so and the unemployed being more than 2 times more likely.

8.4.7 Reasons for healthcare bribery

Table 17. Reasons for paying to access HealthCare.

Reasons for paying for access to healthcare	Counts	% of Total	Cumulative %
Long queue	134	39%	39%
Appreciation for the service provided	74	21%	60%
Health worker solicited	58	17%	77%
To access a specialist	32	9%	86%
To access medicine	49	14%	100.0 %

Following the order from the most common reasons, majority of the respondents accepted to pay bribes to access healthcare services in public health facilities in the last six months because they wanted avoid long queues, others offered bribes so as to show an appreciation for the services provided, some offered payments or gifts or favours because they wanted to access a specialist; and the remaining respondents offered payments or gifts or favours because they wanted to access medicine.

8.4.8 The effect of healthcare bribery on poverty levels

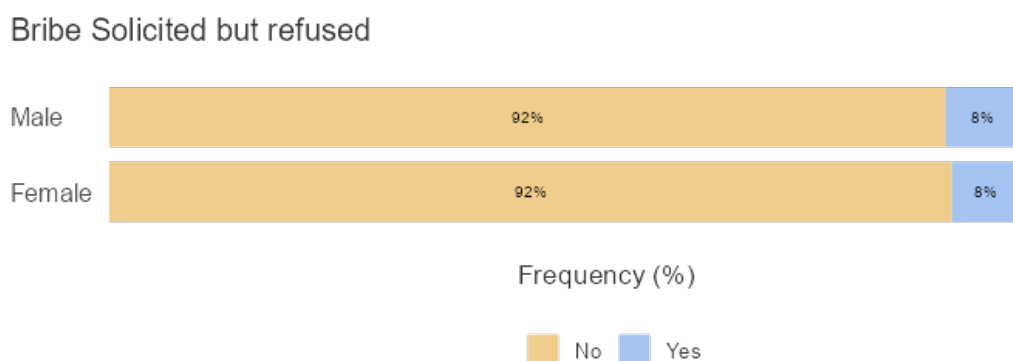
Assuming representativeness of survey and equal variances within wage segments, we calculated the effect of healthcare bribery on people’s earnings in relation to the poverty line (defined as

earning below 81,900UGX⁴). Hence, this calculation excludes dependents or retired and only includes those employed or looking for work. Based on the surveyed income levels, it appears that 37.11% are already below the poverty line, 14.4% of those in slightly higher earning segments (between 82,000 and 98,000UGX) would drop below the poverty line on average over the course of a year if they engaged in healthcare bribery. Given the healthcare bribery levels recorded in this survey of around 10%, this would mean that 1.5% of the population would be pushed into poverty by healthcare bribery. This would indicate a total number of 706,800 people.

Other estimates of healthcare corruption, like the Global Corruption Barometer which conduct a more large-scale assessment, actually place it much higher than this survey results, at around 31% for Uganda. This would indicate that 4.5% of the population would be pushed into poverty by healthcare corruption (around 2 million people).

8.4.9 Whether Respondents have been asked by a health care professional but refused to give unofficial payments, gifts or favours in order to access healthcare by gender

Figure 9. Whether Respondents have been asked by a health care professional but refused to give unofficial payments, gifts or favours in order to access healthcare by gender

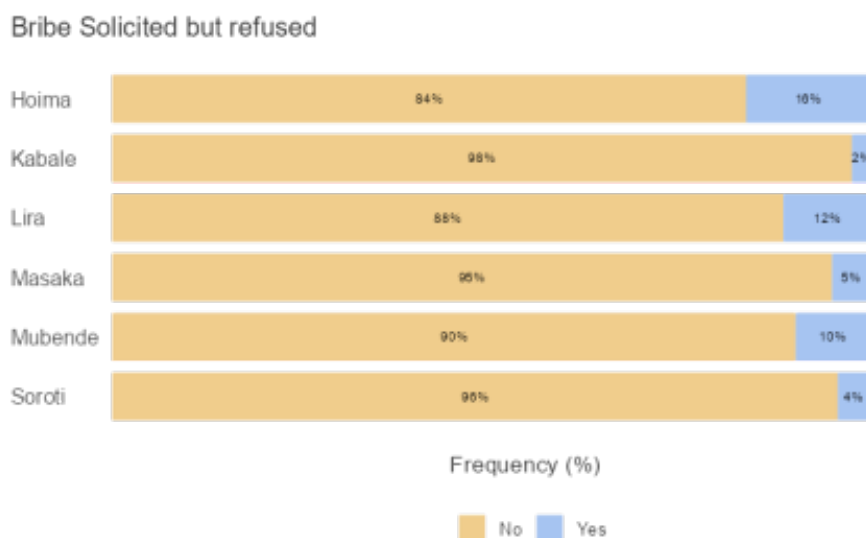


Results in Table 21 indicate that a similar amount of men (394 cases) and women (385 cases) have been asked by healthcare professionals but refused to give unofficial payments, gifts, or favours, in order to access healthcare in a public health facility.

⁴ The International Poverty Line is at 2.15 USD (PPP) per day. The conversion factor was 1331 in 2020 (<https://www.indexmundi.com/facts/uganda/ppp-conversion-factor>) and 31 days in a month, which equals 81,900 rounded.

8.4.10 Whether Respondents have been Asked by A health care Professional but refused to give unofficial payments, gifts or favours in order to access healthcare or Not by District

Figure 10. Whether Respondents have been Asked by A health care Professional but refused to give unofficial payments, gifts or favours in order to access healthcare or Not by District



The findings in Figure 10 indicate that majority of the respondents who have been asked by healthcare professionals but refused to give unofficial payments, gifts, or favours, in order to access healthcare in a public health facility come from Hoima district (232 cases) and they were followed by those coming from Lira district (182 cases). However, cases were few in Kabale, Masaka and Soroti.

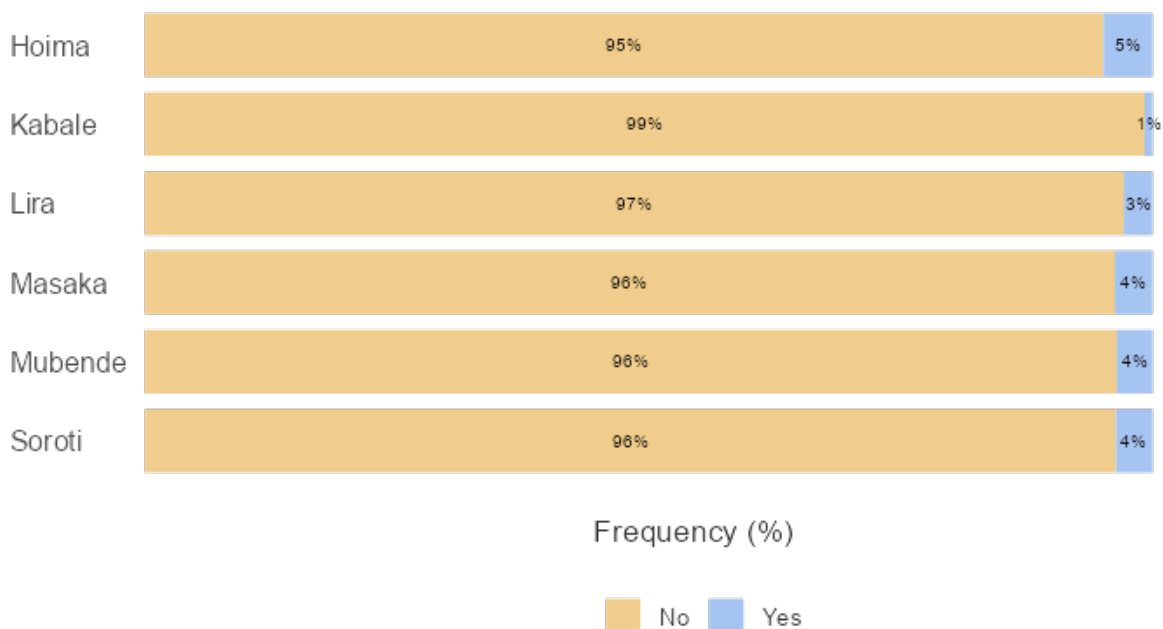
8.5 Vaccination Card/ Certificates.

This section determines whether respondents paid for vaccination cards / certificates with or without being vaccinated. The findings regarding these are presented in the following tables disaggregated by gender and district.

8.5.1 Whether Respondents Paid for Proof of COVID-19 Vaccination.

Figure 11. Whether Respondents Paid for a Proof of COVID-19 Vaccination

Payment for Proof of Vaccination



The results in Table 23 indicate that about 315 respondents paid for a proof of vaccination (vaccination card/certificate, travel card) and a large number of these (90 cases) came from Hoima district. Majority of the respondents paid for a proof of vaccination (vaccination card/certificate, travel card) to a public health professional, others paid it to a private company, some paid it to a friend or acquaintance while others paid it to a private health professional.

8.5.2 Reasons for paying for Proof of COVID-19 Vaccination.

Table 18: Reasons for paying for Proof of COVID-19 Vaccination.

Reasons for paying for Proof of COVID-19 Vaccination	Counts	% of Total	Cumulative %
Cross-border travel	2	1%	1%
In-country travel	20	7%	8%
To be able to go to work or education	65	22%	30%

Reasons for paying for Proof of COVID-19 Vaccination	Counts	% of Total	Cumulative %
To access services (health facilities and public offices, etc)	55	19%	49%
To speed up the process	30	10%	59%
Needed the card but not the vaccine	61	21%	80%
To download the certificate from the Ministry of Health portal	56	19%	100.0 %

The major reasons for paying for a proof of vaccination included the desire to have the card but not the vaccine, to go abroad for work or school, to travel across districts, to speed up the process for a proof of vaccination, to access services (health facilities, public offices etc.), and to download the certificate from the Ministry of Health portal.

8.5.3 Cost of Proof of Vaccination by Gender (in UGX).

Table 19: Cost of Proof of Vaccination by Gender (in UGX).

	Gender	N	Mean	Median	Minimum	Maximum
Cost of proof of vaccination (in UGX)	Male	47	17834	5000	2	265000
	Female	41	11530	6000	2	50000

The survey results in the Table 22 indicate that men paid more for their vaccination proof on average, which might be due to outliers as the lower median indicates

8.5.4 Cost of Proof of Vaccination by District (in UGX).

Table 20: Cost of Proof of Vaccination by Districts (in UGX)

Descriptives						
	District	N	Mean	Median	Minimum	Maximum
Cost of proof of vaccination (in UGX)	Hoima	35	24712	10000	2	265000
	Kabale	7	12143	5000	2	50000
	Lira	6	5834	2501	2	20000
	Masaka	6	3083	3500	500	5000
	Mubende	14	6286	5000	1000	20000
	Soroti	20	10975	7500	1000	50000

In Hoima, it appears that the cost of a bribe to receive the proof of vaccination was the highest on average, followed by Kabale and Soroti.

8.5.5 Cost of Proof of Vaccination by Residential Areas (in UGX)

Table 21: Cost of Proof of Vaccination by Residential Areas (in UGX)

Descriptives						
	Type of Area	N	Mean	Median	Minimum	Maximum
Cost of proof of vaccination (in UGX)	Peri-Urban	20	13460	7500	200	50000
	Rural	46	18276	5000	2	265000
	Urban	19	9632	9000	2	50000

Results in Table 27 indicate that cases of payments for a proof of vaccination were more registered among the people residing in rural areas than other areas.

8.5.6 Likelihood of paying for proof of vaccination by socio-demographic factors:

The rural population appears to be less likely to have paid for proof of vaccine than urban population, by 56%. At the same time, some districts appear to have a lower likelihood of respondents paying for proof of vaccine compared to Hoima, including Kabale, Lira, and Mubende. Especially in the latter two the likelihood is 43% and 29% respectively lower than in Hoima.

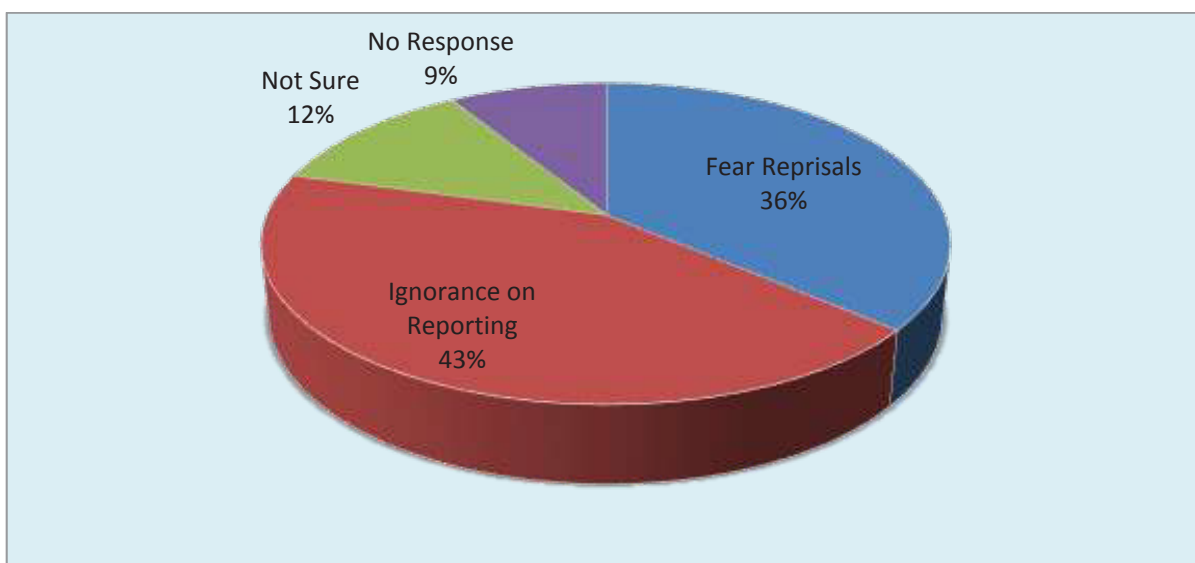
Higher education makes it two times more likely that one paid for the vaccine proof compared to those without formal education. This might be explained when having vaccine proof was more important to those with higher education (e.g. for travelling, accessing workplaces, etc.).

Similarly, higher earnings seem to have an effect on paying for vaccine proof making it 1-2 times more likely if the respondents' earnings are higher.

In summary, a person of higher education living in Hoima and earning well will be more likely to pay for vaccine proof compared to the counterparts across the various socio-demographic dimensions.

8.6 Reporting Corruption Cases related to COVID-19 Vaccine

Figure 12. Ability to Report Corruption in COVID-19 Vaccine



On whether respondents could report incidents of corruption in relation to the country's COVID-19 response without fear, or they risked retaliation or other negative consequences if they spoke out, these results in Figure 13 indicate that out of the 15,248 responses (*based on multiple responses*), 43% of the respondents did not know how and where to report incidents of corruption, 36% of the respondents feared reprisals for reporting cases of corruption, 12% of them had no idea on reporting corrupt cases and 9% of them refused to answer.

9 EQUITY IN ACCESSIBILITY OF COVID-19 VACCINES IN THE SIX SELECTED DISTRICTS

9.1 COVID-19 Information Accessibility

In this survey, respondents were tasked to give the content and nature of information they were provided with on access to COVID-19 vaccines. The findings regarding these are presented in the following tables.

9.1.1 Whether Respondents Were Given all the information Needed about Vaccine distribution

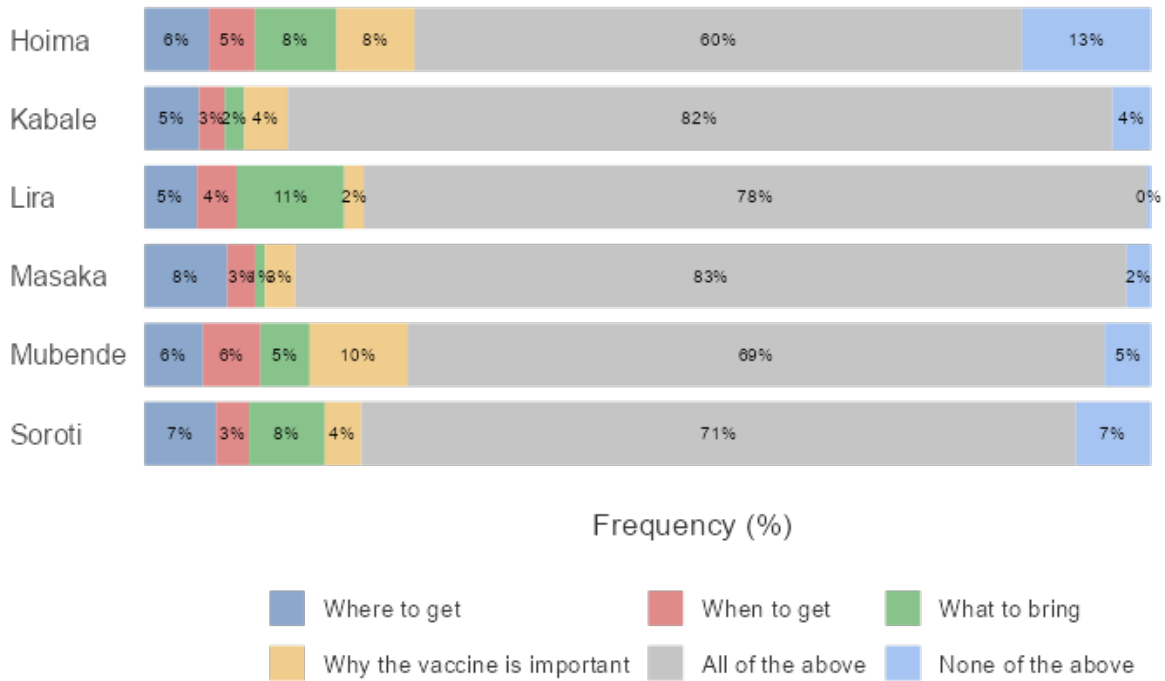
Table 22: Whether Respondents Were Given all the information Needed about Vaccine distribution

District	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	Total
Given All Information About Vaccine							
Where to get a vaccine	57	53	50	79	56	63	358
	6.4%	5.4%	5.2%	8.2%	5.8%	7.1%	6.3%
When to get a vaccine	41	25	38	27	55	29	215
	4.6%	2.6%	3.9%	2.8%	5.7%	3.3%	3.8%

District							
Given All Information About Vaccine	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	Total
What you need to bring in order to get a vaccine	72	19	103	9	47	67	317
	8.1 %	1.9 %	10.7 %	0.9 %	4.9 %	7.6 %	5.6 %
Why the vaccine is important	69	42	19	29	94	32	285
	7.7 %	4.3 %	2.0 %	3.0 %	9.8 %	3.6 %	5.0 %
All of the above	538	802	749	794	668	630	4181
	60.4 %	82.0 %	77.8 %	82.6 %	69.3 %	71.0 %	74.1 %
None of the above	114	37	4	23	44	66	288
	12.8 %	3.8 %	0.4 %	2.4 %	4.6 %	7.4 %	5.1 %
Total	891	978	963	961	964	887	5644
	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Figure 13. Distribution on Whether Respondents Were Given all the information Needed about Vaccine distribution by district.

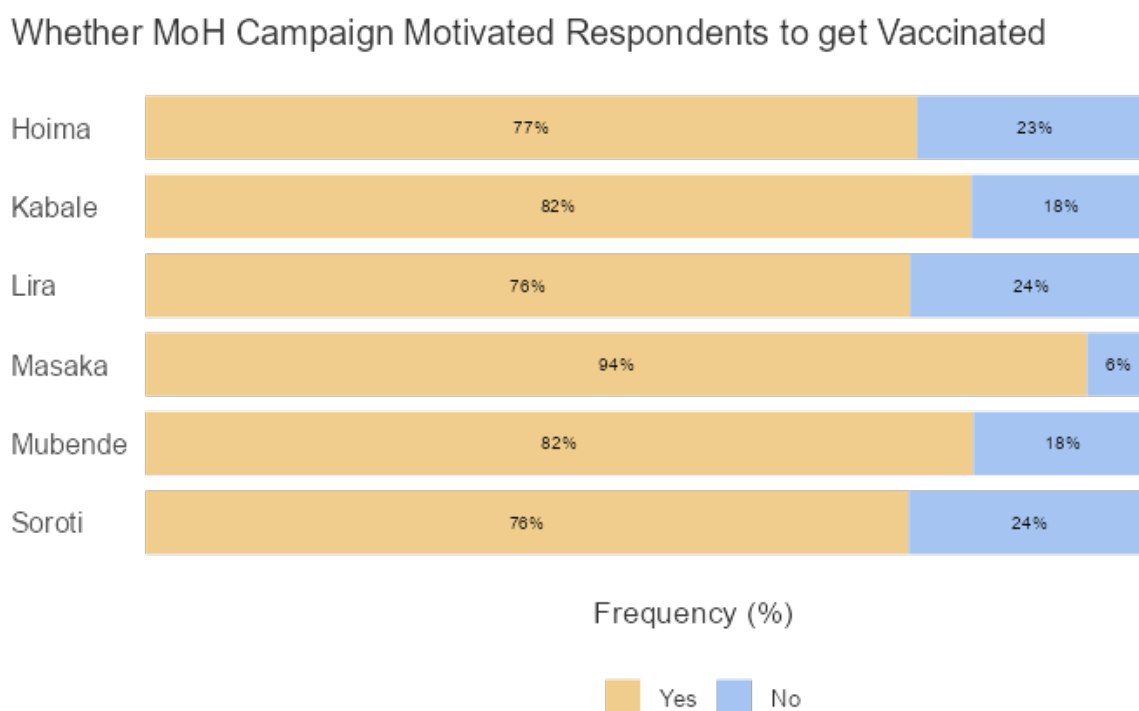
Given All Information About Vaccine



The results in Table 25 show that most of the respondents received all the information regarding the location to get vaccine, the date for receiving vaccine, the requirements needed to receive the vaccine and the importance of receiving the vaccine. However, especially in Hoima, respondents felt that they did not get all the required information about vaccine. This highlights that the MoH campaign has reached the majority of people but still a significant number have been left uninformed.

9.1.2 Whether the Ministry of Health Communication and Outreach Campaign Motivated Respondents to Get the Vaccine.

Figure 14. Whether the Ministry of Health Communication and Outreach Campaign Motivated Respondents to Get the Vaccine



The results in Figure 15 show that out of 5,784 vaccinated respondents, 4,594 (79.4%) of them were motivated by the communication and outreach from the Ministry of Health to get the vaccine. However, about 1,190 (20.6%) of the respondents were not motivated by the communication and outreach campaign by the Ministry of Health. This suggests that the communication and outreach campaigns by the Ministry of Health played a great role in enhancing COVID-19 vaccine uptake among people but has not convinced all.

Out of 4,594 motivated respondents, 1,892 of them were motivated by the communications and outreach campaigns by the Ministry of health because they clarified how, when and where people could get the vaccine; the programs improved the trust in health services of 1,585 respondents, and the programs reduced health concerns associated with the vaccine of 1,117.

However, out of the 1,190 respondents who did not feel motivated by the communications and outreach campaigns by the Ministry of Health, 652 of them said that the communication and outreach campaigns did not affect their decision to the vaccine; 314 of them stated that they did

not notice any outreach campaign by the Ministry of Health, while 224 of the respondents noted that the communication and outreach campaigns were not of good quality.

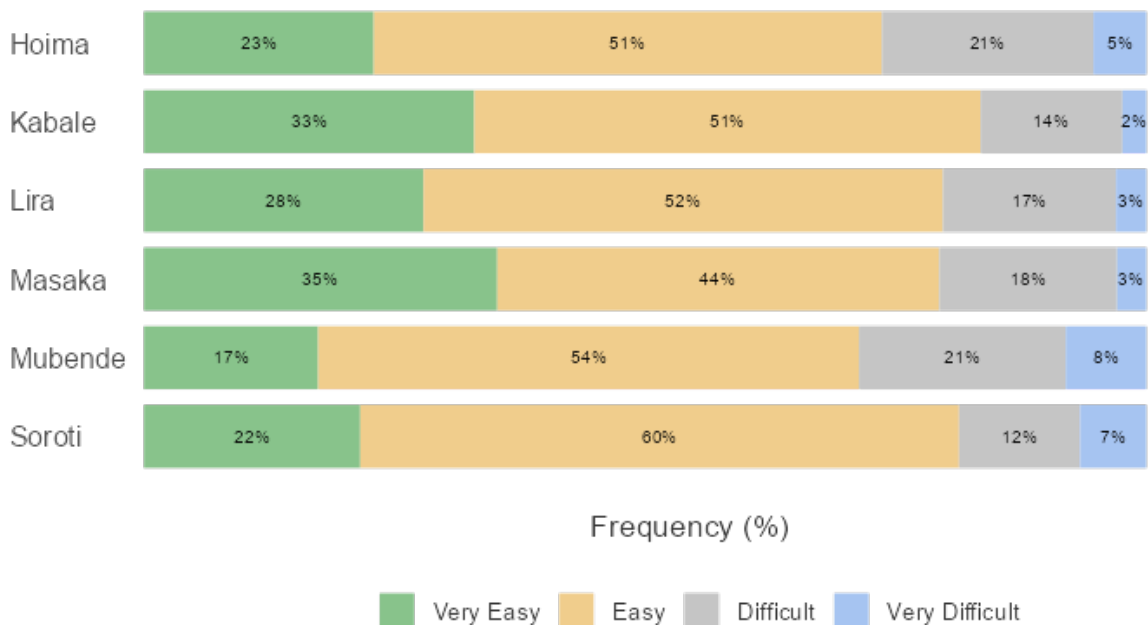
9.2 Barriers Encountered in Attempting to Obtain COVID-19 vaccine

This survey determined the barriers encountered by respondents in attempting to obtain COVID-19 vaccines. The findings regarding these are presented in the following tables.

9.2.1 Easiness and Difficulty in obtaining the COVID-19 Vaccine

Figure 15. Easiness and Difficulty in obtaining the COVID-19 Vaccine

How Easy / Hard was it to Obtain the Vaccine



The findings in Figure 16 indicate that majority of the respondents (2,924) found it easy to obtain the COVID-19 vaccines, 1,493 of the respondents found it very easy to obtain COVID-19 vaccines. Nevertheless, about 1,240 of the respondents still found obtaining COVID-19 vaccines either difficult or very difficult. This could suggest that some groups of people got it easier to obtain the vaccine while others got it difficult to obtain it.

On barriers encountered in attempting to obtain vaccines, it was noted that some participants encountered barriers while others did not encounter any barriers in attempting to receive COVID-19 vaccines. Out of 5,929 respondents (based on multiple responses), the concern of 1,284 was long waiting times to get the vaccine, lack of vaccines available was the barrier of the 730 of

the respondents, time to get to distribution site was another barrier for 729 respondents, cost to get to distribution site was also another barrier of 496, being turned away from vaccination site was the barrier of 109 respondents, being asked for favours was the barrier of 91 respondents and being asked to pay was the barrier of 40 respondents. Nevertheless, 2,372 of the respondents did not encounter any barriers in their attempt to obtain COVID-19 vaccine.

9.2.2 Likelihood of encountering difficult access the COVID-19 Vaccine by socio-demographic (regression analysis):

Mubende has the highest likelihood for more difficult access, then Lira, and lastly Hoima. For Kabale, Masaka and Mubende, there is a statistically significant relationship between the district and the ease of accessing the vaccine, being 34 and 32% lower in the first two and 45% higher in the latter case.

Education is a significant predictor of the difficulty of accessing the COVID-19 vaccine. Those with a bachelors' degree or higher found it the easiest, while the likelihood for difficult access goes down the lower one's education level is.

The higher earnings levels are significant predictors of ease of access to the COVID-19 vaccine. However, compared to the unemployed, the employed, dependents, and retired are more likely to experience more difficult access to the COVID19-vaccine, by 36%, 53% and 65% respectively. This may be due to the fact that the unemployed might have been most flexible to adjust to vaccine schedules.

Compared to the lowest earning band, those in the mid-range (Between 90,000 and 98,000 Shillings) are more likely to experience difficult access, while other higher earning segments have a lower likelihood to do so.

Those identifying as male are less likely to experience difficulties in accessing the COVID-19 vaccine, by 13%, compared to females.

In summary, a male with tertiary education and high income living in Mubende district will be most likely to have experienced easy access compared to his counterparts across the various sociodemographic dimensions.

9.3 Means of Transport Used by Participants to reach Vaccination Centres

Table 23: Means of Transport Used by Participants to reach Vaccination Centres

Transport means	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
Bicycle	27	3	76	10	2	54	172
Boda	252	73	386	253	407	158	1529
Privately owned vehicle	5	6	10	3	2	3	29
Others	43	1	2	5	6	0	57
Walking	558	330	478	507	333	727	2933
Total	885	413	952	778	750	942	4720

As it can be seen in Table 26, different means of transport were used by participants to reach vaccination centres. Out of 4,720 of the vaccinated respondents, 2,933 of them walked to the vaccination centres, 1,529 of them used boda and 172 used bicycles to reach at vaccination centres. Other means of transport used by respondents included privately owned vehicles. This finding suggests that many vaccination centres in 2022 were brought as close as possible the vaccine beneficiaries.

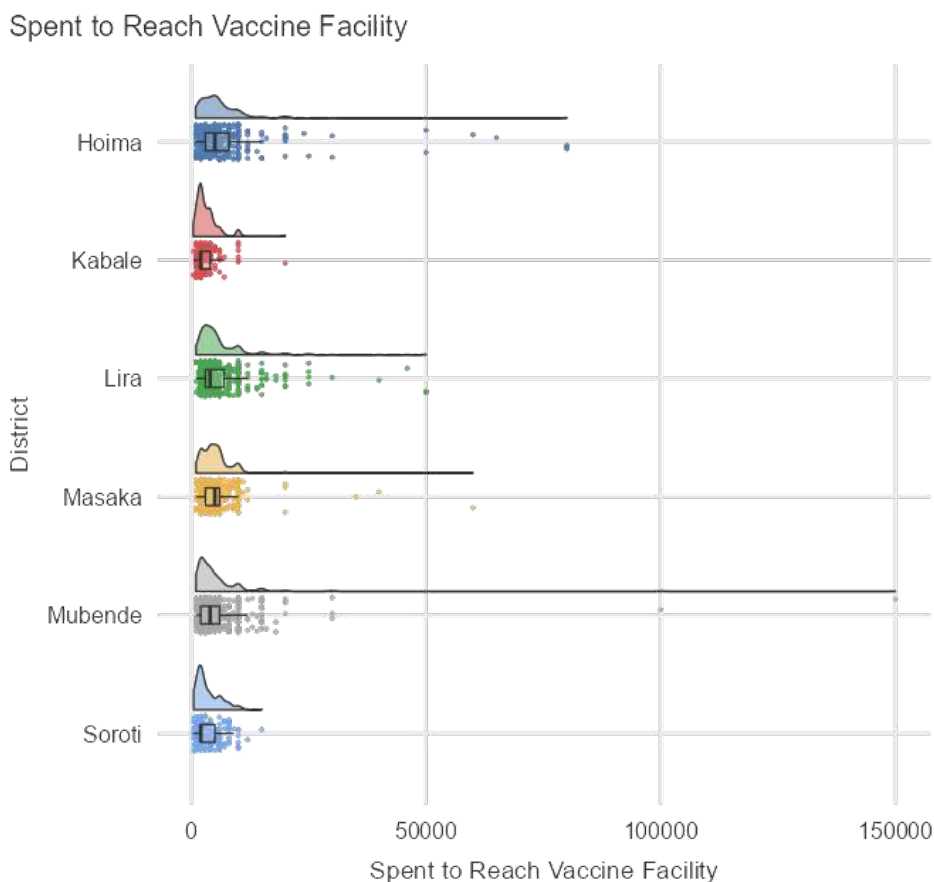
9.4 Amount of money spent to reach the vaccination Centre by respondent (in UGX)

Table 24: Amount of money spent to reach the vaccination Centre by respondent (in UGX)

Descriptives

	District	N	Mean	Median	Minimum	Maximum
Money spent to reach vaccine facility (in UGX)	Hoima	361	7103	5000	900	80000
	Kabale	125	3295	2000	400	20000
	Lira	429	6092	4000	1000	50000
	Masaka	317	5397	5000	1000	60000
	Mubende	507	5438	4000	1000	150000
	Soroti	205	3542	2000	500	15000

Figure 16. Amount of money spent to reach the vaccination Centre by respondent (in UGX)



Considering the maximum amount of money spent to reach the vaccination centres, Table 27 indicates that transport fares incurred by those from Mubende and Hoima districts could go up to 150,000 UGX and 90,000 UGX respectively (however, on average Mubende has the lowest average fare). Individuals from Soroti district did not incur high costs to reach to vaccination centres as the highest amount of money individuals paid to reach to vaccination centres was 15,000 UGX only. This finding could suggest that some people from Mubende and Hoima had to travel far distances in search for vaccines.

9.5 Reasons why vaccinated individuals chose not to receive the vaccine earlier

Some respondents had chosen not to receive the vaccine earlier on because they had received a lot of false information about the vaccine (1,900), unavailability of vaccine (892), others had previously refused because of the perceived risk of the vaccine (813), some had earlier on refused because of lack of trust in medical services (490). Some other reasons included not perceiving COVID-19 as a threat, obtaining the vaccine certificate before getting the vaccine, being afraid of affording the vaccine, thinking that vaccination would take too much time or effort.

9.6 Whether all correct procedures were followed at the distribution center

On whether correct procedures were followed at the health facility or vaccination centres, majority of the respondents generally agreed that all the necessary procedures were followed up in administration of COVID-19 vaccines though some respondents claimed that they were not asked any form of identification during vaccine administration and some claimed that they were not provided proof of vaccination after obtaining the vaccine.

9.7 Myths/misconceptions that respondents thought drive an individual's decision to obtain the vaccine.

The myths or misconceptions that deterred respondents from receiving the vaccines earlier on included: the myth that vaccines cause death, that the vaccine is dangerous/harmful, that the vaccine has sexually related issues, that the vaccines have reproductive issues, that religious convictions had earlier on deterred them from obtaining the vaccine; that the vaccine was not working, that COVID-19 was not real, and that contracting COVID wouldn't be a major risk.

10 HESITANCY IN OBTAINING COVID-19 VACCINES IN THE SIX SELECTED DISTRICT

Those who have not yet obtained COVID-19 vaccines also participated in this survey so that factors that influence their failure to get vaccinated could be determined. The results regarding these are presented and discussed below.

10.1 Whether the respondents have NOT received the vaccine because they do not want to receive the vaccine, or because they have been unable to receive the vaccine

The findings indicate that out of the 5,618 unvaccinated respondents, 2,669 (54%) of them did not want the vaccine; 1813 (36%) of them were unable to receive the vaccine, 287 (6%) of the respondents did not give any response regarding the question, 184 (4%) of the respondents stated that they did not know why they were hesitant to get COVID-19 vaccination.

10.2 Reasons for Choosing Not to Receive COVID-19 Vaccines.

Table 25: Reasons for Choosing Not to Receive COVID-19 Vaccines

What were the reasons you chose not to receive	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
Belief that the disease is not serious	61	192	57	183	118	66	672
Perceived risk of the vaccine	138	267	257	101	178	167	1108
Lack of trust in medical services	39	76	86	168	117	119	605
Too much time to get it	37	33	29	55	43	32	231
Too costly	13	2	3	3	5	3	29
Don't Know	8	20	0	13	16	2	59
Total	296	590	432	523	477	389	2,709

Results in Table 28 indicate that out of the 2,709 unvaccinated respondents to this question, 1,108 of them chose not to receive the vaccine because of the perceived risk of the vaccine, 672 decided not to receive the vaccine because of belief that the disease is not serious; 605 of them refused to receive the vaccine because they lacked trust in medical services; 231 refused to receive the vaccine because it takes too much time to get it; and 29 respondents refused to receive the vaccine because they claimed that it is too costly.

10.3 Reasons why respondents did not get convinced by the MOH Communication and Outreach to Get Vaccinated

Table 26: Reasons why respondents did not get convinced by the MOH Communication and Outreach to Get Vaccinated

Why did the Ministry of Health communication and outreach not convince you to get vaccinated	District						Total
	Hoima	Kabale	Lira	Masaka	Mubende	Soroti	
I haven't noticed any outreach campaign	71	31	47	44	130	101	424
It did not affect my decision to the vaccine	139	298	156	282	225	140	1240
It was not of good quality	101	140	156	187	99	160	843
N/R	44	101	79	131	84	13	452
Total	355	570	438	644	538	414	2959

The findings in Table 29 indicate that of the 2,959 respondents, 1,240 felt unconvinced to take vaccine because the communication and outreach campaign by the MOH did not affect their decision to the vaccine; 843 claimed that the communication and outreach programs was not of good quality; while 424 of them claimed that they did not notice any outreach campaign.

10.4 Barriers unvaccinated respondents encountered in attempting to receive the Vaccine.

The barriers respondents encountered in attempting to receive COVID-19 vaccine included time to get to distribution site (667 cases), long waiting times (589 cases); lack of vaccines available (498 cases); cost to get to distribution site (190 cases); being turned away from the vaccination site (156 cases); and being asked to pay bribe or give a gift or favor which they were unable to do (144 cases).

II RECOMMENDATIONS

To prevent cases of corruption, inequity and hesitancy in COVID-19 vaccine, the following recommendations are forwarded:

- Local Governments should strengthen the One Health Approach as a collaborative effort of multiple disciplines to attain optimal health for everyone.
- Government should adapt to a Multi-sectoral approach towards management of epidemics and pandemics so that everyone is brought on board
- MOH and relevant stakeholders should continuously conduct sensitization and awareness raising among the communities including the vulnerable communities on the importance of vaccination.
- MOH should constantly monitor the trends of vaccine hesitancy and address emerging issues as they arise.
- There is a need for the MOH to work hand in hand with the Ministry of ICT to expand the ICT infrastructure across the country. This will address the challenges like accessing vaccination certificates experienced during the COVID-19 vaccination.
- MOH, CSOs and other stakeholders should continuously create awareness on vaccines being free and popularize reporting channels for such incidents so that communities can ably monitor and report any corruption incident in the vaccination process.
- MOH should intensify programs that promote the health of communities by taking services closer to them as opposed to the health facility model of health service delivery.

12 SUMMARY CONCLUSION

In conclusion, Equitable and Transparent Access of Healthcare services is crucial if a country is to realise Sustainable Development Goal three (Ensure healthy lives and promote well-being for all at all ages) to which COVID-19 vaccines are no exception.

Several months into the fight against the COVID-19, it was appreciated that the only way out of the COVID-19 pandemic was for everyone, everywhere, to have equitable and swift access to vaccines. As such, various approaches were made by the Ministry of Health in collaboration with different actors to ensure equitable and transparent access to the COVID-19 vaccines. These approaches included; door to door vaccination, vaccination outreaches, adverts running in different local languages and effective advocacy by civil society.

Despite the different strategies to ensure that the COVID-19 vaccination is conducted in a transparent and equitable manner, the survey found out that; inadequate communication and outreach campaigns on COVID-19 vaccination and bribery cases mainly stemming from wanting the proof of vaccination and not the vaccine which costs varied depending on the socio-demographics of the respondents. To counter the above-mentioned challenges, the Government of Uganda specifically the MoH should among other approaches uphold the Multi stakeholder approach to managing the distribution of vaccines for such pandemics as well as continuous sensitization of masses on the importance of vaccination.

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