

# COVID-19 AND ITS IMPACT ON HIV RISK BEHAVIOUR AND USE OF HIV PREVENTION METHODS IN SELECTED AREAS IN MANICALAND, EAST ZIMBABWE



## INTERIM RESULTS FROM A GENERAL POPULATION SURVEY

*May 14, 2021*

### **Background**

In this study, we aim to find out how the COVID-19 pandemic and local responses to it have affected HIV risk behaviours and use of HIV prevention methods in the general population. The study is being done in eight sites in Manicaland province – two high-density suburbs in Mutare city, two small towns, two large-scale agricultural estates, and two subsistence farming areas – where baseline data on the immediate pre-COVID-19 situation and recent telephone contact details for study participants are available from a survey conducted in 2018/2019. Two rounds of a telephone-based household census and survey are planned – the first is in progress currently; the second will be conducted later this year or early in 2022 (whenever is most useful). In each round, the fieldwork will be carried out in two phases, with one site from each socio-economic stratum included in each phase. In each site, a random sample of two-thirds of household members aged 15 years and above will be eligible for individual interviews. A longitudinal qualitative study is being run in parallel with the surveys.

Interim results on a selection of key indicators are being produced on a monthly basis. A more complete analysis (to include formal statistical analyses and reporting of 95% confidence intervals) will be conducted shortly after the data collection has been completed. The study is being funded by the Bill and Melinda Gates Foundation.

### **Current status of the survey**

Data collection for the first survey began in February, 2021 and is expected to run until the end of June 2021. The current report includes data provided by 4500 people who were interviewed between February 25<sup>th</sup>, 2021 and May 14<sup>th</sup>, 2021. As at May 14<sup>th</sup>, the first phase of the survey had been largely completed and the second phase had started.

### **Status of the local COVID-19 epidemic and response**

The national COVID-19 lockdown introduced on January 2<sup>nd</sup>, 2021 was still in place when the survey started but was eased shortly afterwards on March 1<sup>st</sup>, 2021. According to the national COVID-19 situation reports, the cumulative numbers of confirmed COVID-19 cases and deaths countrywide up to May 14<sup>th</sup> were 38535 and 1582 respectively. In Manicaland province, 387 new cases of COVID-19 were confirmed and 7 new deaths occurred from the start of the survey and May 14<sup>th</sup>; bringing the totals since the beginning of the pandemic to 4076 confirmed cases and 195 deaths respectively. A COVID-19 outbreak was detected at a boarding school in one of the study areas around April 16<sup>th</sup>, 2021 with approximately 200 cases being reported. At national level, up to May 14<sup>th</sup>, 571,460 people had received the first dose of a vaccine and 203,781 people had received their second dose.

The results of the survey to date on the effects of the COVID-19 epidemic and response on the study population are shown in Table 1. The average score on the knowledge index is similar for men and women and has been consistent at around 60% throughout the survey period to date. The main gaps in knowledge appear to be lack of knowledge about the risks of infection from touching a person with the virus, touching surfaces which have the virus on them, touching one's eyes, nose or mouth with unclean hands, and contact with bodily fluids from an infected person. Self-reported compliance with Government regulations and guidance on COVID-19 safety precautions has also been consistent at around 75%. Even in late February and March 2021, personal risk perception of becoming infected with the COVID-19 virus was low (17%)

and it remains at a similar level currently in both sexes. Women's average number of social contacts increased from 35 to 68 at the end of the latest national COVID-19 lockdown before reducing to 54 in May 2021. For men, this number followed a similar trend but was lower (at around 30) and the changes were less pronounced.

1.7% of survey respondents reported having had a confirmed symptomatic case of COVID-19 at some point since the beginning of the pandemic. The rate was higher for women (2.1%) than for men (1.1%). Very few men (<0.1%) reported having had a confirmed asymptomatic case; the rate for women was 0.4%. However, 2.4% of women and men who had not been tested suspected they had had COVID-19 and also reported having had common symptoms of the disease since April 2020.

Vaccine hesitancy is relatively low (24%), higher in women (28%) than in men (15%), and appears to be reducing over time (from 30% in March 2021 to 19% in May 2021). Vaccine coverage in older people and other vulnerable groups increased rapidly from 2% in March 2021 to 20% in May 2021.

The proportion of women reporting violence from male intimate partners within the last 12 months was high (8.9%) in March 2021 - i.e. at the end of most recent national COVID-19 lockdown - and fell in May 2021 to 5.2%.

In the Manicaland study areas, 20.1% of women and 13.5% of men were experiencing poor mental health towards the end of the national lockdown; reducing to 16.5% and 6.3%, respectively, in May 2021.

### **Impact of COVID-19 on HIV risk and use of prevention services**

The results of the survey to date on the effects of the COVID-19 pandemic on HIV risk behaviours and on use of HIV services in the study population are shown in Table 2. Results on similar indicators from the 2018/19 pre-COVID-19 survey are shown for comparison. Some caution should be exercised in interpreting differences between the results of the two surveys bearing in mind the change in data collection methods from face-to-face interviews in 2018/19 to telephone-based interviews in 2021, that intensified VMMC and PrEP promotion activities were implemented amongst young people for 6 months after the 2018/19 survey in parts of the study sites, and that the new data so far have been collected predominantly from the first four of the eight study sites. In some cases, sample sizes are small particularly in the current survey which is still in progress. Survey data on sexual risk behaviours can be subject to participation, recall and social desirability biases.

There was no overall difference in the proportion of survey respondents reporting a non-regular sexual partner in the last 12 months in the current survey period compared to the pre-COVID-19 period (9.6%) and a small increase for men (16.8% *versus* 15.4%). However, there was a small drop for women (5.5% *versus* 6.2%) and the proportions of sexually-active respondents reporting more than one partner in the last month were lower in the current survey period for both men (1.9% *versus* 3.2%) and women (0.6% *versus* 1.1%). Amongst men and women whose most recent sexual partner was a non-regular partner, the proportion who reported not using condoms all or most of the time in the last 2 weeks fell slightly to 14.2% in the current survey period from 16.6% in the pre-COVID-19 period. It is possible that the people who are continuing to have casual partners in the COVID-19 period are disproportionately those who do use condoms on a consistent basis. However, the numbers of such individuals are quite small. In both periods, most survey respondents with non-regular sexual partners were motivated to use condoms and felt they could access them (lack of access increased only slightly to 2.4% from 1.2%) and lack of capacity to use condoms effectively (e.g. due to low skills, low self-efficacy or lack of partner support) was the main barrier to use (>40% in both periods).

Uptake of VMMC in the last month in young men in Manicaland fell to 0.9% between February and May 2021 from 1.1% prior to the COVID-19 pandemic. Lack of motivation to take-up VMMC actually declined to 27.3% from 44.2% (i.e. *more* men reported wanting to get circumcised) but reports of lack of access to VMMC services amongst those wanting to be circumcised increased to 18.6% from 10.5%. Reports of lack

of capacity to take up VMMC services amongst young men with motivation and access to these services also increased to 62.4% from 42.8%.

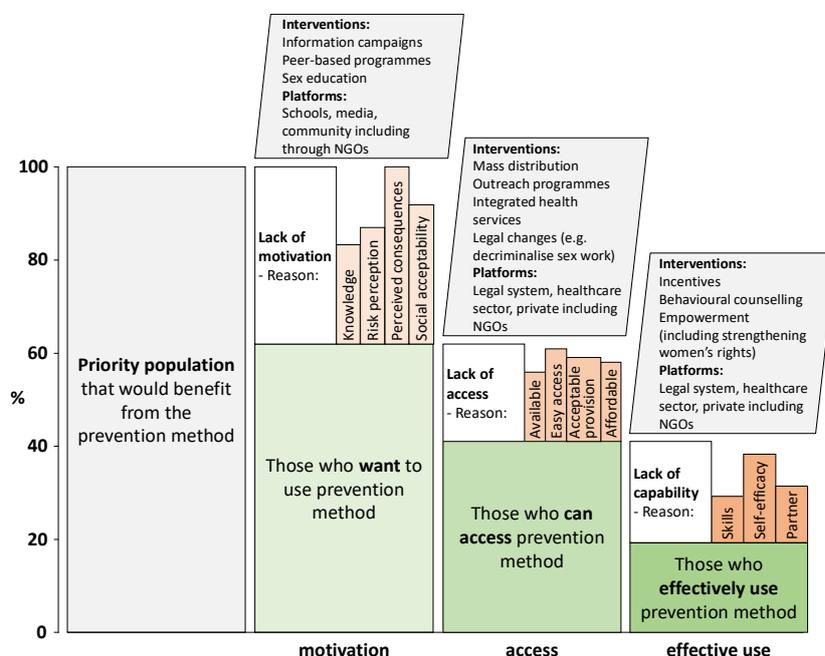
Use of PrEP amongst sexually-active HIV-negative adolescent girls and young women was very low (0.5%) in the study areas prior to COVID-19 and had increased only marginally (to 1.6%) in the current survey period despite intensive promotion activities in some of the study areas. Lack of motivation to use PrEP fell to 82.8% from 92.1% and lack of access to PrEP services fell to 14.8% from 23.3%, possibly due to increases in knowledge of PrEP and local provision, but lack of capacity to use PrEP effectively was reduced only slightly to 89.3% from 91.3%.

Self-reports of HIV testing in the last 12 months amongst sexually-active HIV-negative individuals were high in both sexes and do not appear to have been reduced following the COVID-19 outbreak. Perhaps surprisingly, reports of lack of access to HIV testing services actually fell to 5.3% in the current survey period from 8.2% in the pre-COVID19 period. This reduction was particularly strong in women (to 26.% from 5.9%).

In the current survey period, 10.0% of men and 12.7% of women who experienced recent symptoms of sexually transmitted infections reported not having sought treatment within one week. Unfortunately, no comparable indicator was measured for the immediate pre-COVID-19 period.

There was a modest increase in the proportion of HIV-positive men initiated on treatment who reported recent cessation or inconsistent adherence to ART (12.6% *versus* 11.0%) but little change for women or for men and women combined.

**Figure:** Illustrative HIV prevention cascade elaborating gaps in implementation of an HIV prevention method in a hypothetical priority population, explanatory factors that may contribute to these gaps, and intervention approaches and platforms that may be appropriate to address these factors.



# COVID-19 AND IT'S IMPACT ON HIV RISK AND USE OF HIV PREVENTION METHODS



**Table 1: COVID-19 INDICATORS 14 May 2021**

Indicator	Combined					Males					Females				
	Cumulative	Month ending:				Cumulative	Month ending:				Cumulative	Month ending:			
	28 Jul '21	29 Jun '21	28 May '21	27 Apr '21	26 Mar '21	28 Jul '21	29 Jun '21	28 May '21	27 Apr '21	26 Mar '21	28 Jul '21	29 Jun '21	28 May '21	27 Apr '21	26 Mar '21
1 COVID-19 knowledge index (%)	61		61	60	64	60		61	60	61	62		62	60	65
2 COVID-19 compliance index (%)	75		74	75	76	74		73	73	75	76		76	77	76
3 COVID-19 risk perception (%)	17		14	19	17	19		15	22	17	16		13	18	16
4 Social contacts	36		33	39	30	31		27	34	30	50		54	68	35
<b>SARS-CoV-2 cases</b>															
5a Confirmed symptomatic (%)	1.7		2.3	1.5	1.4	1.1		0.9	0.8	1.9	2.1		3.1	2.0	1.0
5b Confirmed asymptomatic (%)	0.2		0.6	0.0	0.2	0.0		0.0	0.0	0.0	0.4		1.0	0.1	0.3
5c Suspected (%)	2.4		2.7	2.6	1.5	2.3		2.6	2.7	1.2	2.4		2.7	2.5	1.6
6 COVID-19 vaccine hesitancy (%)	24		19	23	30	15		13	14	20	28		22	28	36
7 COVID-19 vaccine coverage (%)	9		20	6	2	9		18	5	5	9		21	6	1
8 Intimate partner violence (%)	7.7		5.2	8.4	8.9						7.7		5.2	8.4	8.9
9 Mental health (%)	15.6		12.5	16.2	17.5	8.4		6.3	6.9	13.5	20.1		16.5	22.0	20.1
<b>Total number of participants</b>	<b>4500</b>		<b>1170</b>	<b>2226</b>	<b>1104</b>	<b>1737</b>		<b>460</b>	<b>846</b>	<b>431</b>	<b>2763</b>		<b>710</b>	<b>1380</b>	<b>673</b>

# COVID-19 AND ITS IMPACT ON HIV RISK AND USE OF HIV PREVENTION METHODS



**Table 2: HIV RISK INDICATORS** 14 May 2021

Indicator	Combined			Males			Females		
	Cumulative	Pre-COVID	Month ending	Cumulative	Pre-COVID	Month ending	Cumulative	Pre-COVID	Month ending
	28 Jul '21	29 Jun '21	28 May '21 27 Apr '21 26 Mar '21	28 Jul '21	29 Jun '21	28 May '21 27 Apr '21 26 Mar '21	28 Jul '21	29 Jun '21	28 May '21 27 Apr '21 26 Mar '21
<b>HIV risk behaviours</b>									
1 Non-regular partner(s) in last 12 months	9.6	9.6	8.6 10.6 8.5	15.4	16.8	15.2 18.2 15.8	5.5	6.2	4.7 6.6 0.0
2 Multiple partners in last month	1.1	1.9	1.2 1.2 0.7	3.2	1.9	2.5 1.6 1.8	0.6	1.1	0.5 0.9 0.0
3 Unprotected sex at last sex with a non-regular partner	14.2	16.6	16.4 14.6 10.0	17.2	18.2	21.2 17.7 16.0	8.4	15.9	9.1 10.3 0.0
<b>Gaps in condom cascade for people with non-regular partners</b>									
4a Lack of motivation	5.3	5.4	5.0 5.9 4.4	10.5	5.3	11.3 12.5 6.0	2.3	5.5	1.3 2.3 3.5
4b Lack of access	2.4	1.2	2.4 2.0 3.5	2.1	1.2	2.0 2.3 1.8	3.0	1.2	3.0 1.4 6.7
4c Lack of capacity to use effectively	41.7	46.6	100.0 40.0 40.0	16.7	46.5	100.0 75.0 100.0	66.7	46.6	100.0 100.0 50.0
<b>Gaps in VMMC cascade</b>									
5 VMMC uptake in last month									
5a Lack of motivation									
5b Lack of access									
5c Lack of capacity to use effectively									
<b>Gaps in PrEP cascade</b>									
6 Currently using PrEP									
6a Lack of motivation									
6b Lack of access									
6c Lack of capacity to use effectively									
<b>Gaps in HIV testing cascade</b>									
7 HTS uptake in last 12 months	65.4	59.5	61.4 66.7 66.9	63.7	52.3	62.1 63.0 66.7	67.3	64.2	62.2 69.5 67.7
7a Lack of motivation	6.2	8.7	5.5 7.0 5.4	4.3	10.2	4.0 5.2 3.1	5.5	7.6	4.5 6.2 5.3
7b Lack of access	5.3	8.2	8.0 5.0 3.5	11.2	12.0	11.1 11.9 10.2	2.6	5.9	6.4 1.8 0.7
7c Lack of capacity to use effectively	26.3	28.9	29.3 24.5 26.8	25.0	33.9	27.2 24.5 23.4	26.9	26.1	30.4 24.5 28.1
8 Delayed seeking STI treatment	12.4	N/A	10.4 10.8 16.9	10.0	N/A	20.0 10.0 0.0	12.7	N/A	9.3 10.9 18.5
9 Gaps in ART adherence	8.2	8.5	7.4 9.3 6.7	12.6	11.0	14.7 10.9 13.8	6.5	7.5	3.3 8.7 3.9
Total number of participants	4500	9803	1170 2226 1104	1737	4074	460 846 431	2763	5729	710 1380 673

## APPENDIX

### Notes on construction of COVID-19 and HIV risk indicators

#### COVID-19 indicators

*COVID-19 knowledge index:* Constructed using responses to questions on five ways in which the new coronavirus can spread from person-to-person. Greater weight given to correct answers that are given spontaneously.

*COVID-19 compliance index:* Constructed using responses to questions on levels of consistency of compliance with guidance on hand washing and sanitising, avoiding social gatherings, going out for non-essential reasons, wearing face masks, and on following Government regulations on safety when using public transport.

*COVID-19 risk perception:* Measured using a question on the respondent's perception of his or her own chances of contracting the COVID-19 virus.

*Social contacts:* A social contact was defined to be an interaction between two individuals – either physical, involving skin-to-skin contact such as a handshake, or non-physical, involving a two-way conversation with three or more words in the physical presence of each other but with no skin-to-skin contact. Calculated as the total number of such contacts in a day at work, on public transport, or at bars, restaurants, nightclubs or shebeens.

*Confirmed symptomatic SARS-CoV-2 cases:* Based on self-reports of having received a positive SARS-CoV-2 test result after developing common symptoms of COVID-19 disease.

*Confirmed asymptomatic SARS-CoV-2 cases:* Based on self-reports of having received a positive SARS-CoV-2 test result after testing for reasons other than developing common symptoms of COVID-19 disease (e.g. contacts of confirmed cases, health workers and hospital patients).

*Suspected COVID-19 cases:* Individuals self-reporting suspected COVID-19 disease who also reported having experienced common symptoms of COVID-19 disease (i.e. fever, cough and/or loss of sense of smell or taste) since April 2020.

*COVID-19 vaccine hesitancy:* Constructed using responses to Likert scale questions on how strongly respondents agreed that COVID-19 vaccines were safe, effective, compatible with their religious beliefs, and important to take.

*COVID-19 vaccine coverage:* Measured using a question that asks the respondent whether he or she has received the vaccine themselves. We don't currently have questions specifically about the vaccine type of about first and second doses.

*Mental health problems:* The WHO PHQ-9 scale was used to identify those with moderate, moderately severe, or severe depression.

#### HIV risk indicators

*Non-regular partners in last 12 months:* Proportion of respondents who have ever had sex reporting one or more non-regular sexual partners in the 12 months preceding the interview.

*Multiple partners in last month:* Proportion of respondents who have ever had sex reporting more than one sexual partner in the month preceding the interview.

*Unprotected sex with recent non-regular partner:* Proportion of respondents whose most recent sexual partner was a non-regular partner who report not using condoms all the time or most of the time in the last two weeks.

*Gaps in the condom cascade for people with non-regular partners:* Proportions of respondents with non-regular partners in the last two weeks who: 1) lacked motivation to use condoms; 2) were motivated but lacked access to condoms; and 3) were motivated and could access condoms but were unable to use them effectively. See the Figure below for a pictorial representation of the HIV prevention cascade formulation used in the study.

*VMMC uptake in the last month:* Proportion of previously-uncircumcised young men (ages 15-29 years) who took up VMMC in the last month.

*Gaps in the VMMC cascade:* Proportions of young men who: 1) lacked motivation to take up VMMC; 2) were motivated but lacked access to VMMC; and 3) were motivated and could access VMMC but lacked the capacity to take it up (e.g. due to lack of social/practical skills, self-efficacy, or partner support).

*PrEP use in the last month:* Number of HIV-negative young women (aged 15-24 years) who were sexually-active in the last month who reported using PrEP currently.

*Gaps in the PrEP cascade:* Proportions of young women who: 1) lacked motivation to take up PrEP; 2) were motivated but lacked access to PrEP; and 3) were motivated and could access PrEP but lacked the capacity to take it up (e.g. due to lack of social/practical skills, self-efficacy, or partner support).

*HIV testing in the last 12 months:* Proportion of sexually-active HIV-negative respondents who reported an HIV test in the last 12 months.

*Gaps in the HIV testing cascade:* Proportions of HIV-negative sexually-active respondents who: 1) lacked motivation to take up HIV testing; 2) were motivated but lacked access to HIV testing; and 3) were motivated and could access HIV testing but lacked the capacity to take it up in the last 12 months.

*Delayed seeking STI treatment:* Respondents reporting symptoms of sexually transmitted infections who took longer than 7 days to seek treatment.

*Gaps in ART adherence:* Proportion of people living with HIV initiated on ART who reported having stopped taking the drugs in the last year, taking the drugs occasionally or never in the last month, or forgetting to take the drugs occasionally or quite often in the last month.