Factors that influenced access and utilisation of sexual and reproductive health services among Ugandan youths during the COVID-19 pandemic lockdown: An online cross-sectional survey

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Abstract

Background

The COVID-19 pandemic has caused a wide range of disruptions in health care access in many low and middle income countries. The aim of this study was to explore factors that influenced access and utilisation of sexual and reproductive health services among Ugandan youths during the COVID-19 pandemic lockdown.

Methods

This was an online cross-sectional study carried out from April 2020 to May 2020 in Uganda. An online questionnaire was used and participants aged 18years to 30 years were recruited using the snowballing approach. The statistical analysis was done using STATA version 14.2.

Results

Out of 724 participants, 203 (28%) reported not having information and/or education concerning sexual and reproductive health (SRH). About a quarter of the participants (26.9%, n=195) reported not having access to testing and treatment services of sexually transmitted infections during the lockdown. Lack of transport means was the commonest (68.7%) limiting factor to accessing SRH services during the lockdown followed by the long distance from home to SRH facilities (55.2%), high cost of services (42.2%) and curfew conditions (39.1%). Sexually transmitted infections were the commonest (40.4%) problems related to SRH during the lockdown followed by unwanted pregnancy (32.4%) and sexual abuse (32.4%). Limiting factors were more prevalent among the co-habiting youths [CPR: 1.3 (1.13-1.49) and APR:1.2 (1.06-1.41)] followed by unemployed [CPR: 1.3 (1.09 - 1.53) and APR:1.2 (1 - 1.42)] and non-salaried [APR:1.2 (1- 1.42)] than other participants. The bivariate and multivariate regression analyses indicate that problems were more prevalent among the co-habiting youths [CPR: 2.7 (1.88 - 3.74) and APR: 2.3 (1.6 - 3.29)] followed by the unemployed [CPR: 2 (1.27 - 3.2) and APR: 1.6 (1.03 - 2.64)] than in other categories.

Conclusion

The findings of this study show that Ugandan youths had limited access to SRH information and services during the COVID-19 lockdown. Cohabiting and unemployed youths were the most affected by problems related to SRH. Lack of transport means and high cost of services were the major limiting factors to access SRH services among the youths. The findings call for concerted efforts from the Government and other stakeholders to incorporate SRH among the priority services when designing responses to any outbreak crisis.

Plain English Summary

The world is facing a global health crisis due to the current COVID-19 pandemic. The pandemic is causing disruptions in accessing health services including access to sexual and reproductive health (SHR) services. An online cross-sectional study was conducted in the month of May 2020 to explore the factors affecting access to SRH services among Ugandan youths during the COVID-19 pandemic lockdown. Seven hundred twenty-four Ugandan youths participated in an online survey. Data was analysed to identify the associated factors. The results showed that Ugandan youths were unable to access information and services related to SRH during the COVID-19 lockdown. Cohabiting and unemployed participants were mainly affected by problems related to SRH. Lack of transport means and high cost of services were the major limiting factors to accessing SRH services. A quarter of the participants reportedly had no access to testing and treatment services of sexually transmitted infections during the lockdown. The commonest problems related to SRH was sexually transmitted infections, followed by unwanted pregnancies, sexual abuse, unsafe abortions, pregnancy complications and lack of antiretroviral drugs. Of the 320 participants who were using modern family planning, the majority used condoms, followed by emergency pills, intrauterine devices and injectable.

The above findings indicate that effective measures should be put in place to ensure access and availability of sexual and reproductive health services for Ugandan youths during outbreaks such as the COVID-19 lockdown.

Introduction

On 11th March, 2020, the World Health Organization (WHO) declared COVID-19 a pandemic [1]. According to the WHO, as of 16th December 2020, a total of 72,196,732 cases of COVID-19 had been confirmed worldwide (2,393,051 confirmed in Africa), with 1,630,521 deaths (56,427 deaths registered in Africa) giving a case fatality ratio of 2.3% globally (2.4% in Africa) , and the numbers continue to rise rapidly [2-3].

Uganda announced a lockdown and dawn to dusk curfew on 20th March, 2020 and as of 16th December 2020, Uganda had registered 28,733 confirmed cases of COVID-19 with 10,070

recoveries and 225 reported deaths [2].

Governments are stepping up their response to rapidly reduce disease spread with many countries having chosen to apply mass quarantine, lockdown and/or social distancing [4]. In the midst of COVID-19 spread in Uganda and as the Government implements different pandemic control measures, access to sexual and reproductive health services is being severely curtailed, with direct and indirect consequences for the young people [5]. Experience in the past epidemics has shown that lack of access to essential health services and shut-down of services unrelated to the epidemic response, resulted in more deaths than the epidemic itself [6].

Learning from experience during the Ebola outbreaks, governments managed the outbreaks by diverting resources away from other health priorities hence affecting the needs of young people, despite their heightened risks [7-8]. Response efforts focused on containing the outbreaks and reducing the number of new cases. While this focus was important, protocols were never established to protect young people's sexual and reproductive health during the outbreaks [9]. As quarantines and school closures were put in place to contain the spread of disease in different countries across the world [1,5,10], women and adolescent girls were made more vulnerable to sexual and reproductive health problems such as coercion, exploitation and sexual abuse, lack of contraceptives methods, unsafe abortions and delays in the care of pregnant women [11,12]. In the absence of focused responses from governments to protect the gains made in young people's sexual and reproductive health, similar challenges could be expected during the COVID-19 pandemic across different countries [9-11]. The United Nations Population Fund (UNFPA) in its COVID-19 Pandemic Global Response Plan emphasized that sexual and reproductive health is a significant public health issue that demands urgent and sustained attention and investment [12]. The Inter-Agency Working Group (IAWG) on reproductive health has also recommended that comprehensive sexual and reproductive health services should be maintained as long as the system is not overstretched with COVID-19 case management [13]

The Government of Uganda issued directives to protect pregnant women's access to maternity services [14]. However, access to essential sexual and reproductive health information, supplies and services such as contraceptives, condoms, comprehensive sexuality education, obstetrics care, menstrual health materials, counselling, gender-based violence support, care for sexual health and wellbeing for young people are not prioritised during the lockdown [14]. The fear of contracting COVID-19 is also discouraging young people from seeking sexual and reproductive health services [15]. The transfer of already limited resources to deal with the pandemic and the absence of health care workers from their original duty may cause interruptions in regular provision of essential SRH services. Furthermore, SRH outcomes may worsen due to gender-based violence (GBV) which can increase the risk of chronic health conditions, disability, HIV transmission, pregnancy complications and even death [16-17]. Reports are emerging of a rise in gender-based violence, unwanted pregnancy among young girls, unsafe abortion, closure of antenatal care services in some of the public health facilities, and a sharp decline in women and girls seeking SRH services [14]. Although the Ministry of Health in Uganda and donors had come up with a strategy of establishing youth-friendly corners at health facilities to increase the uptake of SRH services by the Ugandan youths, these corners were not available during the lockdown [14].

Even before the COVID19 pandemic, young people sexual and reproductive health services in Uganda were inadequate [18]. The Uganda demographic health survey of 2016 points to over 25% teenage pregnancies among sexually active young people by the age of 16 years, and the unmet family planning need in the country stood at 28% [19-20]. Unintended pregnancy is common in Uganda with the attendant high levels of unplanned births, unsafe abortions, and maternal injury and death [19-20]. This study was carried out to explore factors that influenced access and utilisation of sexual and reproductive health services among Ugandan youths during the COVID-19 pandemic lockdown and to inform appropriate intervention measures to respond to young people's sexual and reproductive health during the health emergencies.

Methods

Study design and setting

A nationwide cross-sectional online survey was conducted among the youths in Uganda during the months of April and May, 2020.

Study Participants

The Uganda youth policy defines youths as all young persons, aged 12 to 30 years [21]. This study was focused on Ugandan youths aged 18 to 30 years and living in any of the four regions (Northern, Central, Eastern and Western) of the country at the time of the study. The Ugandan youths aged 18 to 30 years constitute 22.9% (10,326,072.351) of the Ugandan population standing at 44,269,594 in 2019 according to the National Bureau of Statistics [22]. All Ugandan youths able to consent (18 years and above) and with a minimal computer literacy level and able to access and operate WhatsApp, tweeter or Facebook were eligible to participate in the survey. Those who were unable to submit the filled questionnaire were automatically excluded in the data base for the survey.

Data Collection and Instrument

An online structured questionnaire of the study about sexual and reproductive health needs, of the young people in Uganda [23] was developed using Google forms with a consent form that had to be filled before accessing the questionnaire. As the country was under lockdown, social media was used to conduct the survey. A snowball sampling technique was used to pool the initial eligible respondents who were in turn encouraged to recruit more respondents from their acquaintances in different regions of the country by forwarding to them the link to the survey. The

questionnaire was administered for a period of 14 days from 28th April to 11th May 2020. On receiving and clicking on the link, the participants were auto-directed to the informed consent page of the survey tool. After reading the preamble and accepting to participate in the study, they were directed to the questionnaire.

The questionnaire was composed of 22 questions focused on several key constructs. Six questions were related to socio-demographics characteristics (age, sex, marital status, educational level, location, occupation); twelve questions on access to sexual and reproductive health information and services during the COVID-19 lockdown; two questions on limiting factors to access sexual and reproductive health information and services and two questions on sexual and reproductive health problems that Ugandan youth were facing during the COVID-19 lockdown **(S1Table)**.

Data Processing and analysis plan

The questionnaire was pretested and reviewed to ensure correctness and appropriateness to the local context. The statistical analysis was done using STATA version 14.2 (StataCorp, College Station, Texas, USA). Categorical variables were presented using frequencies, graphs and/or figures whereas continuous variables were presented using means, standard deviations (SD).

Bivariate and Multivariate regression analyses were used to investigate relationships of having faced any limiting factor to access sexual and reproductive health information and services, and having had any problem relating to sexual and reproductive health during the COVID-19 lockdown with socio-demographics using the Poisson Regression and presented as Crude Prevalence Ratios (CPR) and Adjusted Prevalence Ratios (APR) respectively.

We used the Poisson Regression with Robust standard error option, to estimate the adjusted prevalence ratios as cross-sectional studies are usually better analysed with Poisson that with Odds since they are not good at-risk assessment [24].

Ethical Considerations

This study was approved by Kampala International University Institutional Research Ethical Committee (UG-REC-023/202018). Data was collected online and the consent form was attached to the questionnaire. Only those who voluntarily accepted to participate in the study were able to access and fill the questionnaire and remained anonymous.

Results

A total of seven hundred thirty-three (733) participants completed the online questionnaire. Nine (9) participants were excluded from the survey because they were above 30 years of age, thus only seven hundred twenty-four (724) were considered for analysis.

Socio-demographic characteristics of participants

Out of 724 participants, 56.4% were male and 78.0% were living single. The mean age of the participants was 24.4 (SD± 2.8) years. The majority (87.2%) had attained an educational level of university and 27.2% were salaried employees. Most participants were from central Uganda (37.8%) followed by western Ugandan (35.1%) and most of them were students (46.5 %) at the time of study followed by paid employment 27.2% (Table 1).

Table 1: Socio-demographic characteristics of participants during the COVID-19 lockdown

Variable	Frequency N (%)
Sample size	724 (100)
Sex	
Female	316 (43.6)
Male	408 (56.4)
Age group in years	
18 to 24	395 (54.6)
25 to 30	329 (45.4)
Marital status	
Living single	555 (78.0)
Married	81 (11.2)
Cohabiting	78 (10.8)
Education level	
University	631 (87.1)
Vocational or Technical Institution	46 (6.4)
Secondary School and below	47 (6.5)
Location/Region in Uganda	
Central Uganda	274 (37.8)
Western Uganda	254 (35.1)
Eastern Uganda	122 (16.9)
Northern Uganda	74 (10.2)
Employment status	
Students	337 (46.5)
Paid employment (employee on a salary)	197 (27.2)
Self-employed (Business/Income Generating Activity)	62 (8.6)
Unemployed: No structured activity	69 (9.5)
Unemployed: Volunteer or unpaid work	59 (8.1)

Access to sexual and reproductive health services of participants during the COVID-19 lockdown

Out of 724 participants, 203 (28.0%) reported not having information and/or education concerning SRH and 521 (72.0%) otherwise. One hundred ninety-five participants (26.9%) reported not having access to testing and treatment services for STIs, 43.5% had access to STIs testing and treatment services while 29.6% participants reported not having information about STIs testing and treatment services. The preferred modern contraceptive methods were not easily accessible to 27.2% (n=197) of the participants during the COVID-19 lockdown. . HIV testing and counselling services were accessible for 48.2% (n=349) participants, while 22 % (n=159) of participants were unable to access the services when they needed them. Out of 62 participants who were on HIV treatment, 50 (80%) had difficulty in accessing HIV drugs during the study period. Menstrual health products were accessible to 26.1% (n=189) of participants while 17.5% (n=127) reported inability to access the services. Pregnancy care was available to 81.8% of 44 participants who were pregnant that time. Post abortion care was not available to 20.8% of the 24 participants who had abortion during the study period as shown in Table 2.

Table 2. Access to sexual and reproductive health services among Ugandan youths during the COVID-19 lockdown

Variables	All (%) n=724
Availability of information and/or education concerning sexuality	
No	203 (28.0%)
Yes	521 (72.0%)
Availability of testing and treatment services of STIs	
No	195 (26.9%)
Yes	315 (43.5%)
Don't know	214 (29.6%)
Access to the preferred modern contraceptive	
Not Easily	197 (27.2%)
Easily	132 (18.2%)
Not Applicable	395 (54.6%)
Availability of HIV testing and counselling services	
No	159 (22%)
Yes	349 (48.2%)
I Don't know	216 (29.8%)
Access to Antiretroviral therapy (medication)	
Not Easily	50 (6.9%)
Easily	12 (1.7%)
Not Applicable	662 (91.4%)
Access to menstrual health products such as sanitary pads	
Not Easily	127 (17.5%)
Easily	189 (26.1%)
Not Applicable	408 (56.4%)
Availability of pregnancy care	
Yes	36 (81.8%)
No	8 (18.2%)
Access to post abortion care services	
Yes	19 (79.2%)
No	5 (20.8%)

Nearly half of the participants (n=357; 49.3%) reported using family planning methods of which 320 (44.2%) and 37 (5.1%) were modern and traditional methods respectively (Figure 1). Out of the 320 participants who were using modern contraceptive during the lockdown, the majority (n=232; 72.5%) were using condoms followed by emergency pills (n=33; 10.3 %), IUD (n=22; 6.9%), injection (n=20; 6.3%). Only 4.1% (n=13) of the participants reported using implants.

The limiting factors to access sexual and reproductive health services and information were reported among 453 (62.6%) of the 724 participants. These factors included lack of transport as the most common (43%), followed by distance from home (34.5%), cost of services (26.4%) and curfew (24.4%). Other limiting factors were fear/negative provider attitude (22.5%), no service provider (21.3%), school closure (12.3%) and unknown place of SRHR services (Figure 2).

The Ugandan youths (n=136; 18.8%) reported having problems related to SRH. STIs (40.4%) were the commonest problem related to SRH during the COVID-19 lockdown, followed by unwanted pregnancy (32.4%) and sexual abuses (32.4%). Other SRH problems included unsafe abortions and pregnancy complications that constituted 17.7% each, lack of ARVs (13.2%), child death (5.9%), fistula (5.2%) as shown in Figure 3.

Having a limiting factor to access SRH among Ugandan youths with their social demographics during the COVID-19 lockdown

The bivariate and multivariate regression analyses in Table 3, show that the limiting factors were more prevalent among cohabiting participants [CPR: 1.3 (1.13-1.49) and APR:1.2 (1.06-1.41)] followed by unemployed [CPR: 1.3 (1.09 - 1.53) and APR:1.2 (1 - 1.42)] and non-salaried [APR:1.2 (1-1.42)] than other participants.

Table 3: Bivariate and Multivariate regression analyses using Poisson Regression of having a limiting factor to access SRH among Ugandan youths with their social demographics during the COVID-19 lockdown

	Bivariate		Multivariate	
Variable	**CPR (95%CI)**	**P-Value**	**APR (95%CI)**	**P-Value**
Sex		0.965	**0.997**	
Female	1		1	
Male	1 (0.89 - 1.12)		1 (0.89 - 1.12)	
Age group in years		0.740	**0.424**	
18 to 24	1		1	
25 to 30	1 (0.91 - 1.14)		0.9 (0.83 - 1.08)	
Marital status		<0.001	**0.016**	
Single	1		1	
Married	1.2 (1.04 - 1.41)		1.1 (0.97 - 1.36)	
Cohabiting	1.3 (1.13 - 1.49)		1.2 (1.06 - 1.41)	
Education level		<0.001	**0.001**	
University	1		1	
Vocational or Technical Institution	1.4 (1.27 - 1.65)		0.9 (0.72 - 1.08)	
Secondary School	1.2 (1 - 1.45)		1.2 (0.94 - 1.48)	
Location/Region in Uganda		0.088	**0.294**	
Central Uganda	1		1	
Western Uganda	1 (0.91 - 1.2)		1 (0.9 - 1.2)	
Eastern Uganda	1.2 (1.03 - 1.4)		1.2 (0.99 - 1.34)	
Northern Uganda	1.1 (0.95 - 1.39)		1.1 (0.92 - 1.34)	
Employment status		0.048	**0.025**	
Student	1		1	
Paid employment (employee on a salary)	1.1 (0.94 - 1.23)		1 (0.87 - 1.2)	
Self-employed (Business/Income Generating Activity)	1.2 (1 - 1.44)		1.1 (0.94 - 1.41)	
Unemployed: No structured activity	1 (0.79 - 1.22)		1 (0.79 - 1.21)	
Unemployed: Volunteer/ non-salaried	1.3 (1.09 - 1.53)		1.2 (1 - 1.42)	

APR: Adjusted Prevalence ratios
CI: Confident Interval
CPR: Crude prevalence ratio

Problems relating to sexual and reproductive health with socio-demographics

The bivariate and multivariate regression analyses show that the problems related to SHR were more prevalent among those cohabiting [CPR: 2.7 (1.88 - 3.74) and APR: 2.3 (1.6 - 3.29)] followed by unemployed (Volunteer or unpaid) [CPR: 2 (1.27 - 3.2) and APR: 1.6 (1.03 - 2.64)] than others participants.

Table 4: Bivariate and Multivariate regression analyses using Poisson Regression of problems related to sexual and reproductive health among Ugandan youth with their Socio-demographics during the COVID-19 lockdown

	Bivariate		Multivariate	
Variable	CPR (95%CI)	P-Value	APR (95%CI)	P-Value
Sex		0.902		**0.994**
Female	1		1	
Male	1 (0.72 - 1.33)		1 (0.74 - 1.35)	
Age group in years		0.080		**0.661**
18 to 24	1		1	
25 to 30	1.3 (0.97 - 1.78)		1.1 (0.76 - 1.54)	
Marital status		<0.001		**<0.001**
Single	1		1	
Married	2 (1.38 - 3.02)		1.5 (0.99 - 2.32)	
Cohabiting	2.7 (1.88 - 3.74)		2.3 (1.60 - 3.29)	
Education level		<0.001		**0.001**
University	1		1	
Vocational or Technical Institution	2.3 (1.51 - 3.47)		0.5 (0.31 - 0.74)	
Secondary School	2.2 (1.47 - 3.4)		0.8 (0.45 - 1.33)	
Location/Region in Uganda		0.306		**0.748**
Central Uganda	1		1	
Western Uganda	1.1 (0.74 - 1.56)		1.1 (0.75 - 1.53)	
Eastern Uganda	1.5 (0.97 - 2.2)		1.2 (0.82 - 1.79)	
Northern Uganda	1.1 (0.66 - 1.94)		0.9 (0.55 - 1.59)	
Employment status		0.034		**0.198**
Student	1		1	
Paid employment (employee on a salary)	1.5 (1.03 - 2.12)		1.2 (0.76 - 1.76)	
Self-employed (Business/Income Generating Activity)	1.7 (1.04 - 2.79)		1.2 (0.73 - 2.09)	
Unemployed: No structured activity	0.7 (0.32 - 1.41)		0.7 (0.33 - 1.44)	
Unemployed: Volunteer or unpaid work	2 (1.27 - 3.2)		1.6 (1.03 - 2.64)	

APR: Adjusted Prevalence ratios; **CI:** Confident Interval; **CPR**: Crude prevalence ratio

Discussion

The government of Uganda put in place public health emergency directives during the COVID-19 pandemic and partially lifted the travel ban for pregnant women and people living with HIV/AIDS during the lockdown. However, access to essential SRH services such as contraceptives and other family planning packages like condoms, access to ARVs and menstrual health materials by young people has not been prioritized during the lockdown [14,16].

In this study, we found lack of access to SRH information and services among the youth during the lockdown. These findings further reflect the generally inadequate access to SRH information and services among youths worldwide [16]. In 2015, a study reported a significant unmet need for SRH information, education, and services for married and unmarried young people in Wakiso district in Uganda [25]. Furthermore, it is reported that less than 10% of adolescent women access health facilities and information about family planning in 70 developing countries despite the momentum in implementing SRH in most countries [26].

With global health emergencies, there has been a shift in priorities and as a result, the availability, accessibility and affordability of SRH services have become challenging [16]. During the pandemic, lack and/or reallocation of resources may reduce access to SRH and increase maternal and childhood mortality rates [16]. The West Africa's large, multi-country Ebola Virus Disease (EVD) outbreak of 2014-2016 showed that there were significant impacts on SRH, particularly in the early stages of that outbreak, largely related to health facility closures [27]. Another study from Guinea found a decrease of 51% in Family Planning (FP) visits during the outbreak [28]. The inadequate access to SRH information and services among youths has also been reported by studies in Kenya, Zambia [29], Swaziland [30], and Uganda [31]. Particularly in Uganda, two major surveys conducted among students indicated that young people had limited access to sexual and reproductive health services and HIV/AIDS-related programmes despite their engagement in high-risk sexual behaviours [32-33].

In this study, family planning was being used during the COVID-19 lockdown and 44.2% of the participants were using modern methods. This is lower than what was found in Lao People's Democratic Republic where the use of modern method contraceptives for married women aged 15-49 was of 54.1 % and higher than findings among unmarried women (14.5 %) [34].

Lack of transport was the commonest (68.7%) limiting factor to accessing SRH services and information during the lockdown and this was followed by physical distance from home to facility (55.2%), cost of services (42.2%) and curfew (39.1%). The problem of lack of transport can be explained by the status of the lockdown with the restriction on movement of vehicles especially private cars, taxis and buses as a way of containing the spread of the COVID-19 in the community. The Government of Uganda instituted these restrictive measures following WHO guidelines [3]. During the lockdown, fewer economic activities were allowed in the country in addition to a curfew between 7 pm to 6am. Having no

transport means, a curfew and the high cost of living during the study period meant that most of the participants were unable to access SRH services. A study done by Kiwanuka et al in Uganda, found inequalities in the burden of disease and access to health care a prominent concern in Uganda [35]. It is apparent that the lockdown further compounded an already poor access to health services in Uganda. In Lao People's Democratic Republic, *geographical accessibility* was one of the barriers to access SRH [34] although this was not the case in Rwanda where geographical accessibility to SRH services was not seen as a negative factor influencing access among the young people [36]. However geographical challenges to access were not reported in our study.

Our results indicate that cohabiting was associated with an increased need for sexual and reproductive health services. Cohabiting and being unemployed have been highlighted as factors behind the spike in pregnancy during the Ebola outbreak in Liberia, with girls reportedly having sex in exchange for water, food or other forms of financial protection [37].

This study revealed that STIs were among the commonest (40.4%) sexual and reproductive health related problems faced during the lockdown, followed by unwanted pregnancies (32.4%) and sexual abuses (32.4%). A similar study in Uganda has shown that an increased rate of teenage pregnancy during the COVID-19 lockdown [38].

Each year, there are over six million unintended pregnancies among adolescents, most of whom do not have access to modern contraceptive methods [39]. In 2008, over 1.2 million unintended pregnancies occurred in Uganda and these accounted for more than half of the 2.2 million pregnancies in the country [40]. The Uganda Demographic Health Survey of 2016 indicated over 25% teenage pregnancies among sexually active young people by the age of 16 years and the unmet family planning need in the country stood at 28% [9]. Studies have shown the importance of SRH services in the prevention of unwanted pregnancies, unsafe abortion, reducing maternal and child morbidity and mortality as well as reducing poverty and empowering women [41].

This study had some limitations. We conducted the study during the COVID-19 lockdown hence the need for using virtual online-based approaches. In-depth interviews and focus group discussions to enrich the study findings were not possible. The study was limited to the youths that had access to internet and social media, with an understanding of the English language. Furthermore, a respondent driven virtual snowball sampling method was used so our findings may not be taken as a representation for the general Ugandan youths' population.

Conclusion

The findings of this study show that Ugandan youths had problems to access sexual and reproductive health services during the COVID-19 lockdown. Cohabiting and unemployed (volunteer or unpaid) participants were mostly affected among the youth. Lack of transport means and cost of services were the commonest limiting factors to accessing SRH services. STIs and unwanted pregnancies were the most prevalent problems faced by Ugandan youths during the COVID-19 lockdown. These findings could inform policymakers about the need to ensure continuity of care especially as regards SRH among Ugandan youths and special emphasis should be put on poorer youths especially women.

There is a need for the Uganda government together with other stakeholders to develop SRH guidelines for the outbreak context. Guidance for the delivery of SRH services should include the response plan, health facility and the community in the context of COVID-19, to ensure continued provision of youth friendly sexual and reproductive health and rights information and services.

With disruptions to schools, health services and community centres, new ways to strengthen supply chains and providing information and support to adolescents and young people need to be established. Policymakers must define and promote sexual and reproductive health care as an essential service during any outbreak. This will support the youths to access information and services related to SRH with the view of having services that would cater for all categories of youths.

Data availability

The data used to obtain the findings is available from the corresponding author FKS and the authors SBM and RS on a reasonable request.

Abbreviations

1. APR: Adjusted Prevalence Ratio
2. ARVs: Antiretrovirals
3. CI: Confident Interval
4. COVID-19: Coronavirus Disease 2019
5. CSG: Coronavirus Study Group
6. DRC: Democratic Republique of the Congo
7. HIV: Human Immunodeficiency Virus
8. IUD: Intrauterine device

9. MOH: Ministry of Health
10. SARs: Severe Acute Respiratory Syndrome Coronavirus 2
11. SRH: Sexual and Reproductive Health
12. UBOS: Uganda Bureau of Statistics
13. WHO: World Health Organisation

Declarations

Ethical approval and consent to participate

Expedited ethical approval was acquired from the Institutional Review Board of Kampala International University (UG-REC-023/202018). Consent to participate was obtained through online acceptance.

Consent for publication

Not applicable

Competing interest

Authors declare no competing interest.

Authors contributions

SBM, FKS and RS were the principal investigators, conceived and designed the survey, supervised the online data collection and critically reviewed the manuscript. YM analysed data; KT, SOA and JN reviewed the manuscript development and revised the data tool. JCR and FB revised the methodology. HW and LKK participated in online data collection; CK and PK critically reviewed the manuscript. All authors read and approved the final manuscript.

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Figures

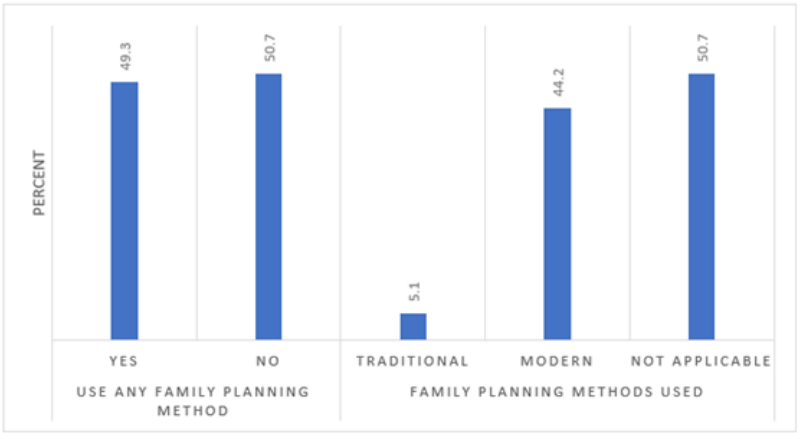

Figure 1

Methods of family planning used by the Ugandan youths during the COVID-19 lockdown

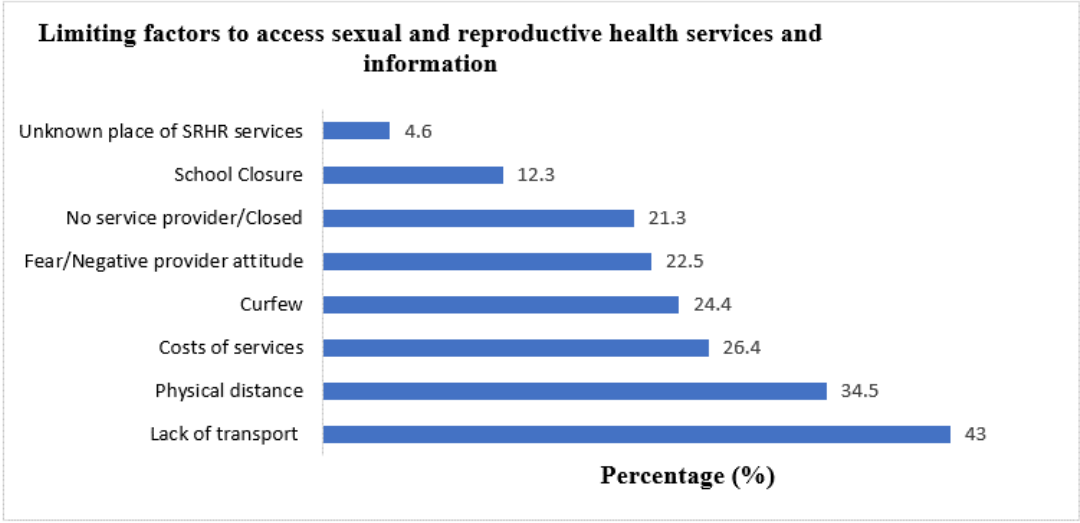

Figure 2

Limiting factors to access sexual and reproductive health services and information among Ugandan youths during the COVID-19 lockdown

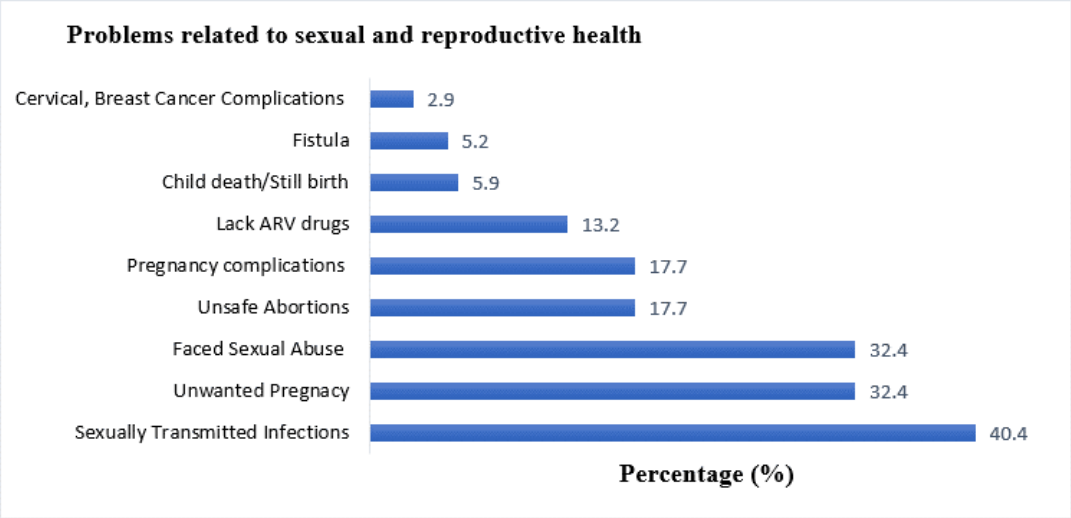

Figure 3

Problems relating to sexual and reproductive health and rights among Ugandan youths during the COVID-19 lockdown

Supplementary Files

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- S1Table.docx