Young people’s access to sexual and reproductive health prevention services in South Africa during the COVID-19 pandemic: an online questionnaire

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ABSTRACT

Introduction The South African government responded swiftly to the first wave of novel coronavirus (SARS-CoV-2) with a nationwide lockdown. Initial restrictions from March–July 2020 required people to stay at home unless accessing essential, life-saving services. We sought to understand how the COVID-19 pandemic and resulting lockdowns affected young people’s access to sexual and reproductive health services in a high-prevalence HIV setting.

Methods We analysed data from a cross-sectional web-based questionnaire conducted with 15–24 year-olds from September–December 2020 in Eastern Cape, South Africa. The questionnaire was promoted through social media platforms. Participants were asked whether and how the COVID-19 pandemic and related restrictions affected their access to sexual and reproductive health services, through closed-ended and open-ended questions. Descriptive statistics using proportions were used to summarise responses, and open text was analysed using thematic analysis.

Results Of 3431 respondents, the proportions reporting ‘more difficulty’ accessing HIV testing services, HIV self-screening kits, condoms, pre-exposure prophylaxis and antiretroviral treatment since the COVID-19 pandemic were 16.8%, 13.7%, 13.9%, 11% and 7%, respectively. In 796 open-text responses, participants described challenges accessing HIV services due to clinics being overwhelmed and prioritising patients with COVID-19, resulting in young people being turned away. Some were afraid of contracting COVID-19 at or en route to clinics. Others were unable to reach clinics because of restricted transport or financial insecurity.

Discussion Young people in Eastern Cape rely on local clinics for services, and large proportions of young males and females faced difficulties or fears accessing clinics during the COVID-19 lockdown. Clinics became overwhelmed or inaccessible, limiting young people’s access to sexual and reproductive health services. In high HIV risk contexts, prevention services and tools must be more accessible to young people, outside of clinics and within the communities and spaces that young people can access without fear or cost.

WHAT IS ALREADY KNOWN ON THIS TOPIC
⇒ Young people face significant barriers accessing sexual health services in South Africa, but we are still discovering how COVID-19 further affected young people’s access to service and the long-term ramifications of service disruptions. Understanding young people’s experiences accessing services during the pandemic is needed to make health systems more accessible and resilient.

WHAT THIS STUDY ADDS
⇒ Through a remote online questionnaire, young people in South Africa shared their experiences with struggling to access sexual health services due to overwhelmed clinics during the pandemic. They described the wide-ranging barriers they encountered while trying to access services, including limited transport, income loss, lockdown regulations and fear of contracting COVID-19. Without being able to access their services through clinics, young people had very few alternatives of where they could receive affordable services.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY
⇒ The barriers and experiences young people present support the need for sexual and reproductive health services to become more reliable and accessible to young people by providing a variety of affordable services outside of clinics and within the communities.

BACKGROUND
On 23 March 2020, the South African government announced a nationwide ‘lockdown’ to control the spread of the first wave of the novel coronavirus (SARS-CoV-2). The strictest levels of lockdown, from March to July 2020, restricted people to stay at home unless accessing essential services. In government-issued guidance, sexual and reproductive health (SRH) services were included in the
This study investigates the impact of the COVID-19 pandemic and resulting government restrictions on young people’s access to SRH services in Eastern Cape, South Africa. In this high-risk context, understanding whether and how services are disrupted can help to ensure that ‘essential’ SRH and HIV services are resilient and accessible to young people.

METHODS
We collected and analysed data from a web-based questionnaire launched online from September to December 2020. Questions about service disruption during COVID-19 were imbedded within a questionnaire designed for the evaluation of a mass media campaign that aimed to improve HIV outcomes among young people in the Eastern Cape. More information about the evaluation has been published elsewhere. The HIV prevalence in Eastern Cape province of South Africa has been estimated at 15.3% among people of all ages. The questionnaire was promoted through targeted advertisements to 15–24-year-olds in Mthatha, Eastern Cape, South Africa, through social media platforms, primarily Facebook. The questionnaire was also promoted in collaboration with local schools, universities, communities and clinics using their Facebook pages and WhatsApp groups. It was available on an internet data-free website, through a reverse-charging arrangement with the service provider. Instead of the participant paying to access the website with their personal internet data, the reverse charging website billed the research team. Those who completed the questionnaire received telephone airtime credit of ZAR50.

For 15–24 year olds, who constitute roughly 16% of the population in South Africa, access to SRH services is essential to live healthy and productive lives. As young people begin to engage in sexual relationships so too begins their need for HIV services including testing, treatment and prevention. The risk for acquiring HIV accelerates quickly from adolescence among females and slightly later among young men. The 2017 South African National household-based HIV Prevalence, Incidence, Behaviour and Communication Survey estimated HIV incidence at 1.51% per year among those aged 15–24 years, higher than any other age group with young women bariring significantly more of the burden. Young people also depend on SRH services for diagnosis of STI and bacterial vaginosis, which are highly prevalent in South Africa and associated with HIV and poor reproductive and sexual health. Young women rely on contraception services to prevent unplanned pregnancy and antenatal care if they become pregnant. The estimated pregnancy rate among women aged 15–24 years in South Africa is around 16%–22%. Despite their need and desire to seek SRH services, many young people avoid healthcare services because of real and perceived barriers to care including stigma, cost and healthcare worker judgement, and loss of privacy.

Open access

RESULTS
A total of 4145 records of the questionnaire were created, while the questionnaire was live online. Records without full consent (n=407) or gender (n=144), or which were likely duplicates (n=163) were removed leaving 3431 (83%) records for analysis. The majority of respondents resided in the city of Mthatha (72%) or elsewhere in Eastern Cape province (11%) and 16% lived in other provinces of South Africa. Respondents predominantly spoke IsiXhosa at home (80%), were female (59%) and aged 20–24 years (69%) compared with 31% aged 15–19 years. Most respondents (83%) were enrolled in education, including 34% in university, 28% in technical/vocational college and 21% in primary or secondary school. Of those who were not full-time students, 10.4% reported being unemployed, while 3.1% reported employment. Many respondents experienced food insecurity with about 40% going to bed hungry at least ‘sometimes’ in the past month.

Of 3431 respondents, the proportions reporting ‘more difficulty’ accessing HIV testing services, HIV self-screening kits, PrEP and ART since the COVID-19 pandemic were 16.8%, 13.7%, 11% and 7%, respectively, with no differences by gender (table 1). A percentage of 13.9 of all participants (females and males) experienced greater difficulty accessing condoms (table 2). About 7% of both females and males reported more difficulty accessing domestic violence services. Difficulty accessing contraception, including barrier methods and hormonal methods, was reportedly greater among females (15.3%) than males (7.1%), and 6.8% of female respondents reported difficulty accessing antenatal care since the pandemic (table 2). There were no differences in antenatal care disruptions by age group, although the question was less applicable and data more likely to be missing among the younger group (15–19 years) compared with the older (20–24 years).

Seven hundred and ninety-six participants wrote an open-text response to explain how the COVID-19 pandemic affected their access to the previously mentioned HIV, and SRH services. The word cloud illustrated in figure 1 highlights the frequency in which young people reported that ‘clinics’ had been ‘affected’. Words such as time, closed, queue, long and numbers described the ways in which COVID-19 had overwhelmed the clinics creating long wait times and closures. Thematic analysis revealed details about how services were affected. Due to COVID-19, clinics were often closed or running a limited service because clinical staff had contracted COVID-19.

One of the staff members in the clinic was tested positive for coronavirus. So, the facility was closed for fumigation of the facility.

Some respondents described clinics being closed for up to 14 days after positive tests were detected among staff.

I haven’t gone for them since the pandemic. It affected us because when they have a case they close the clinics for 14 days, that time we could not go to clinic to get condoms and contraception.

Young people reported that many clinics were only attending to patients with COVID-19 and all other services were suspended or restricted to specific days and hours.

Clinics were mostly centred around COVID-19 and offered no contraception treatment and were sometimes not accessible.

It affected my access big time because I couldn’t go to hospitals or clinic when I was sick because they were full of people who were infected by the virus.

Hospitals have focused more on cases concerning the Coronavirus and neglecting others as if they don’t matter.

Overwhelmed clinics with limited services and an influx of patients with COVID-19 meant that respondents seeking SRH services were waiting in long lines for hours and sometimes were told to come back the next day.

Clinics are always full, it’s not easy getting help because you’ll be on the queue for the whole day, then
around the time that they close the nurses tell you to come back the next day while you didn’t even get help.

Most of these services I usually get them at the clinic. But now due to this pandemic, clinics were being closed often, and even when they were open there would be a huge number of people visiting, increasing the rate of being infected.

I had to book an appointment to go to the clinic whereas I needed help right away. Sometimes they’d tell us to come back tomorrow although we had an appointment.

Respondents also explained that reporting cases of gender-based violence was difficult with police services reportedly overwhelmed with enforcing COVID-19 rules and understaffing due to COVID-19 infections among police officers.

Reporting GBV has been difficult because police were busy arresting people that smoke and drink alcohol who are not violating anyone.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Reported difficulty accessing HIV services by gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since the COVID-19 pandemic caused by coronavirus began, have you experienced more difficulty getting the following services?</td>
<td>Male</td>
</tr>
<tr>
<td>HIV testing services?</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>687</td>
</tr>
<tr>
<td>Yes</td>
<td>217</td>
</tr>
<tr>
<td>Does not apply to me</td>
<td>88</td>
</tr>
<tr>
<td>Do not know</td>
<td>159</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>21</td>
</tr>
<tr>
<td>Missing/no response</td>
<td>145</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
</tr>
<tr>
<td>HIV self-screening kits?</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>680</td>
</tr>
<tr>
<td>Yes</td>
<td>180</td>
</tr>
<tr>
<td>Does not apply to me</td>
<td>104</td>
</tr>
<tr>
<td>Do not know</td>
<td>182</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>26</td>
</tr>
<tr>
<td>Missing/no response</td>
<td>145</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
</tr>
<tr>
<td>PrEP?</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>651</td>
</tr>
<tr>
<td>Yes</td>
<td>140</td>
</tr>
<tr>
<td>Does not apply to me</td>
<td>148</td>
</tr>
<tr>
<td>Do not know</td>
<td>207</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>26</td>
</tr>
<tr>
<td>Missing/no response</td>
<td>145</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
</tr>
<tr>
<td>Antiretroviral treatment for HIV?</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>655</td>
</tr>
<tr>
<td>Yes</td>
<td>90</td>
</tr>
<tr>
<td>Does not apply to me</td>
<td>208</td>
</tr>
<tr>
<td>Do not know</td>
<td>196</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>23</td>
</tr>
<tr>
<td>Missing/no response</td>
<td>145</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
</tr>
</tbody>
</table>

PrEP, pre-exposure prophylaxis.
Due to increased numbers of cases and the police taking their time to respond to specific cases has made it very hard for us to follow up and report cases. Also, some police stations close due to someone having tested positive in the station.

Key themes that we identified during the thematic analysis demonstrate that lockdown rules, prohibiting people from leaving their homes unless accessing essential services, created barriers to SRH services. Some respondents reported that they did not seek SRH services because they were following lockdown guidance to stay home and believed chemists and pharmacies would be closed.

Because of the lockdown most chemists and places to get screening kits were closed. Most hospitals were filled with people with COVID-19 so I couldn't risk going there. And because of this pandemic we were given curfews.

It has affected me because my mobility is limited and these services are often found in certain health insti-

Table 2  Reported difficulty accessing sexual and reproductive health services by gender

<table>
<thead>
<tr>
<th>Since the COVID-19 pandemic caused by coronavirus began, have you experienced more difficulty getting the following services?</th>
<th>Male</th>
<th>Female</th>
<th>Transgender</th>
<th>Prefer not to say</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Condoms?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>770</td>
<td>58.5</td>
<td>1126</td>
<td>55.7</td>
<td>14</td>
</tr>
<tr>
<td>Yes</td>
<td>200</td>
<td>15.2</td>
<td>275</td>
<td>13.6</td>
<td>1</td>
</tr>
<tr>
<td>Does not apply to me</td>
<td>40</td>
<td>3</td>
<td>144</td>
<td>7.1</td>
<td>1</td>
</tr>
<tr>
<td>Do not know</td>
<td>146</td>
<td>11.1</td>
<td>193</td>
<td>9.6</td>
<td>1</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>16</td>
<td>1.2</td>
<td>9</td>
<td>0.4</td>
<td>3</td>
</tr>
<tr>
<td>Missing/no response</td>
<td>145</td>
<td>11</td>
<td>273</td>
<td>13.5</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
<td>100</td>
<td>2020</td>
<td>100</td>
<td>21</td>
</tr>
</tbody>
</table>
tutions so I have to move from home to get them and during this COVID-19 we are encouraged not to go out unless it’s necessary.

Transport was also a large issue for young people as local taxi services, a primary mode of transport, were restricted in the lockdown. This made getting to the clinics to access essential services, like HIV medication, difficult.

It had a very big impact in such a way that it made things very difficult for me because I couldn’t come into contact to people I depend to get money for transport to travel from home to where my clinic is located. So I even defaulted for about a month before I get my medication but at least now I’m getting my meds and taking them properly.

It has affected me drastically because these services are centralized in a town that is located far away from my area so I couldn’t access them freely due to COVID-19 regulations.

I was affected because there was a limit in everything so I had to make sure I wake up early & the taxis were also a problem because of the lockdown conditions.

Respondents also explained that the lockdowns had affected their income sources, either through job loss or becoming isolated from family members who usually provided them with financial support. Financial losses meant respondents could not afford transport to clinics. Respondents also described the financial stresses of having to pay private clinics and pharmacies for SRH services like condoms, contraception and HIV tests that are normally free at public clinics.

I had to go buy lovers plus+ condoms in the shops. It was hard because I did not want to be in the shops in COVID times… and I had to steal some money from my mom’s wallet 2 get cash 4 the condom… I did not want corona and a baby. tough times but yah, neh… I made it happen.

When we needed some health services or medication we’d be told that the pharmacy is closed and we had to buy the medicine from private pharmacies, in some cases I didn’t have money.

The word cloud captures that young people were also ‘afraid and scared’ of becoming ‘infected’ that motivated them to follow lockdown regulations and deterred them from travelling or visiting clinics where they believed they might contract the virus.

I was scared of being in a place where there is a huge number of people because of fear that I could get infected.

I am now afraid to go to the clinic because I know there can be infected people and I might get infected.

I usually go get self-screening kits but during this pandemic I couldn’t because I’m kind of scared of Coronavirus.

Figure 1 An illustrative ‘word cloud’ that captures the frequency at which participants used words to describe how they experienced more difficulty receiving SRH services since the COVID-19 pandemic.

DISCUSSION
Through their experiences and perspectives, young people offered explanations for why the COVID-19 and lockdown measures made it more difficult than usual for some young people in the Eastern Cape to access SRH services. They detailed accounts of clinic disruptions due to the influx of patients, restricted services and under-staffing because of COVID-19 infections that resulted in long lines and young people being turned away from clinics. They also explained the difficulties in getting to the clinics due to limited transport options that had been reduced during lockdowns. COVID-19 impacted respondents’ care-seeking behaviour as they feared contracting the virus and stayed at home due to the lockdown measure regulations. Loss of income due to the pandemic and being unable to receive free clinic services quickly made SHR services inaccessible to some young people. There were few reliable or affordable back up option to clinic-based services meaning when clinics were inaccessible, young people often were unable to get the services they needed from other places.
Similar worrying trends about COVID-19’s negative impact on SRH, including young people’s and adolescents’ health, have been reported in the literature. A study of PrEP in South Africa reported that South African adolescent girls and young women substantially decreased their visits for PrEP during the COVID-19 epidemic, while rates of new HIV infection, STIs and pregnancy increased. In the Gauteng region of South Africa, there was a decline in family planning and termination of pregnancy services as well as a shift away from long-acting reversible contraception. Another study from the Eastern Cape reported a reduction in the availability of STI services resulting from the COVID-19 epidemic potentially increasing the burden of untreated STIs in the community. Gender-based violence prevention and response services in South Africa were impacted by the COVID-19 pandemic due to government restrictions and the failure of government to identify early on if GBV services were essential. Facilities in countries across Africa with similar lockdowns to South Africa saw a drop in antenatal attendances in the first months of the pandemic. Data from a district health information system for KwaZulu-Natal provincial health services found an increase in neonatal mortality was linked to the disruption of health services and diversion of resources to COVID-19. Additionally, modelling in 2020 suggested that disruption due to COVID-19 of ART medication had a real risk of increasing mortality among at risk populations in sub-Saharan Africa.

Those who responded to the question about how COVID-19 had affected health services primarily discussed how local government clinic services had been disrupted. In addition to the barriers created by COVID-19, literature that predates the COVID-19 pandemic reveals that young people in South Africa reported many barriers when accessing clinic-based services. Some of the reported barriers to services are long distances and travel times to clinics, limited and unaffordable transport options and inconvenient clinic hours. Young people also reported that they avoid services because of stigma and fear of judgement from staff. Reports such as these inspired the South African Department of Health to implement youth friendly services with a target to have 70% of healthcare facilities offer youth friendly services by 2012. Unfortunately, the reported provision of these services is far below the target, especially in rural areas. A 2018 study by Smith et al concluded that young people in South Africa are put off by visits to local government clinics ‘which are stigmatising, time consuming, and unhelpful’. The long wait times and queues, as well as diversion of resources during COVID-19 likely made these experiences worse.

However, despite the barriers and short falls of the local government clinic, our findings show that very few participants sought health services from other outlets. Cost and travel expenses make it difficult for young people to access SRH services through models of care structures such as pharmacies and private doctors. No other models of care were mentioned in our findings. This study supports the need to ‘de-medicalise’ some HIV and SRH services to make services more resilient and accessible to young people. This includes the scale up other options for young people to access SRH services within the community or online. Providing various service models allows young people to choose the model of care that best fits their needs. This can also reduce the burden on clinics allowing them to provide quicker and better services. Other SRH models of care that have proven to be feasible and acceptable are community health worker programmes, school-based services, peer navigators and mobile health clinics; however, there has not been enough investment models of care.

Telemedicine services similar to the initiatives that sprang up across the world during the pandemic to provide young people with remote and safe SRH services should be made available to digitally connected young people in South Africa, especially since South Africa has the highest number of mobile users in Africa. Additionally, existing online SRH social networks and forums can be harnessed to reach more young South Africans and link them to services. A narrative review found that telemedicine and mobile health (mhealth) interventions in South Africa that started in response to the COVID-19 pandemic showed that telemedicine and mhealth (defined as the use of mobile devices for medical and public health practice) can be an innovative approach to providing young adults with access to SRH treatment and information. However, issues with implementation and lack of funding show that there needs to be more investments in these areas for them to become reliable models of sexual and reproductive healthcare for young people in South Africa.

To reduce the risk of COVID-19 transmission, this study used only remote internet study methods. Since this questionnaire required a digital device and internet connectivity to access, it is likely that the sample is skewed towards young people who have better access to digital media. An effort was made to minimise the cost of participating in the questionnaire by making the internet questionnaire free to access and providing airtime vouchers to those who participated. However, it is likely that those who have completed the questionnaire had greater access to digital devices, reliable internet access and greater literacy. By result some of them most vulnerable, digitally unconnected young people might have been missed in this questionnaire.

CONCLUSION

Young people in the Eastern Cape of South Africa reported difficulties or fears accessing local clinics during the COVID-19 lockdown. Clinics became overwhelmed or inaccessible, limiting young people’s access to services for HIV prevention, contraception, antenatal care and gender-based violence. Young people appeared to have few alternative, affordable models of care for receiving
HIV and SRH services. In high-risk contexts, prevention services and tools must be considered ‘essential’ and made more accessible to young people, outside of clinics and within the communities and online in spaces that young people can access without fear or cost.

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Contributors VB was responsible for the write up of this paper and the qualitative analysis for the open ended questions. IB, SM, SC and SS were responsible for the questionnaire design and quantitative analysis of the responses; CC, DO and DK were responsible for promoting the survey, recruiting participants and managing incoming data. GA, SP and YD were responsible for questions design and contributed to analysis team meetings. All authors contributed to the write up of the manuscript through reading draft copies and providing comments and edits. IB is responsible for the overall content as the guarantor.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved byEthics was obtained from The Biomedical Research Ethics Committee at University of KwaZulu-Natal, London School of Hygiene & Tropical Medicine and the WHO. Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available on reasonable request.

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REFERENCES
12 South Africa Demographic and Health Survey. National department of health (NDoH), statistics South Africa (Stats SA), South African medical Research Council (SAMRC), and ICF; 2016.
13 UNAIDS. Sites to go: closing gaps, breaking barriers, reducing injustices; 2018.


