

Access to and quality of sexual and reproductive health services in Britain during the early stages of the COVID-19 pandemic: a qualitative interview study of patient experiences

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ABSTRACT

Introduction Access to quality sexual and reproductive health (SRH) services remains imperative even during a pandemic. Our objective was to understand experiences of delayed or unsuccessful access to SRH services in Britain during the early stages of the COVID-19 pandemic.

Methods In October and November 2020 we conducted semi-structured telephone interviews with 14 women and six men reporting an unmet need for SRH services in the Natsal-COVID survey, a large-scale quasi-representative web-panel survey of sexual health and behaviour during COVID-19 (n=6654). We purposively sampled eligible participants using sociodemographic quotas. Inductive thematic analysis was used to explore service access and quality and to identify lessons for future SRH service delivery.

Results Twenty participants discussed experiences spanning 10 SRH services including contraception and antenatal/maternity care. Participants reported hesitancy and selfcensorship of need. Accessing telemedicine and 'socially-distanced' services required tenacity. Challenges included navigating changing information and procedures; perceptions of gatekeepers as obstructing access; and inflexible appointment systems. Concerns about reconfigured services included reduced privacy; decreased quality of interactions with professionals; reduced informal support; and fewer preventive SRH practices. However, some participants also described more streamlined services and staff efforts to compensate for disruptions. Many viewed positively the ongoing blending of telemedicine with inperson care.

Key messages

- ▶ In describing their experiences of delayed or unsuccessful attempts to access SRH services, participants reported feeling hesitant and some selfcensored their need.
- Challenges to accessing services included confusing and inconsistent information and procedures, and gatekeepers who were perceived as obstructive.
- Participants observed new efficiencies within services, including telemedicine, but also perceived reduced privacy and quality of interaction with providers.

Conclusion The COVID-19 pandemic impacted access and quality of SRH services. Participants' accounts revealed self-censorship of need, difficulty navigating shifting service configurations and perceived quality reductions. Telemedicine offers potential if intelligently combined with in-person care. We offer initial evidence-based recommendations for promoting an equitable restoration and future adaption of services.

INTRODUCTION

Responding to rising COVID-19 cases, the UK announced a national lockdown in March 2020, imposing stay-at-home orders and discouraging non-essential contact including between healthcare workers and patients. To minimise SARS-CoV-2 transmission, providers rapidly adjusted how they delivered sexual and





reproductive health (SRH) services through new protocols, staff redeployment and site closures. ¹ ² Early abortion care via telemedicine was an example of successful adaptability, reducing waiting times and barriers to access³ and increasing satisfaction. ⁴⁻⁶ However, other essential SRH services such as long-acting reversible contraception (LARC) provision or asymptomatic sexually transmitted infection (STI) screening were halted or reduced. ¹ Providers tried to prioritise those with most need who could not be managed remotely for in-person care. ⁸

Access to SRH services remains imperative even during a pandemic.⁹ People have a right to sexual expression, reproductive autonomy, safe childbirth and a life free from infection.¹⁰ The population need for services such as routine and emergency contraception, STI testing and treatment, sexual problems advice or antenatal care is continual. Disruptions to these services can have significant repercussions including unplanned pregnancy, undiagnosed STIs and sexual dysfunction.

The Natsal-COVID study sought to understand the initial impact of service reduction and reconfiguration in Britain (consisting of England, Scotland and Wales). 11 SRH services in Britain are delivered by a range of providers including general practitioners (GPs), specialist integrated sexual health services and screening programmes (e.g., chlamydia or cervical cancer screening). Natsal-COVID Wave 1, undertaken in July-August 2020, is a quasi-representative webpanel survey designed to understand the early impact of the pandemic on SRH. The study highlighted unmet need for SRH services, with one in 10 survey participants reporting unsuccessful attempts to access SRH services and one in five men needing but being unable to access condoms. 12 Other UK studies found that men who have sex with men and young people experienced an unmet need for STI testing, contraception and condom access. 13-15 This paper describes the results from qualitative follow-up interviews with Natsal-COVID participants exploring the experiences of unmet or delayed SRH need in the general population. Learning from patient perspectives is crucial to inform recovery and rebuilding efforts during and after COVID-19.8

The study aimed to explore: (1) what challenges arose for patients attempting to access and navigate SRH services during the pandemic, and (2) how COVID-19 protocols and reduced staffing affected patient perceptions of service quality.

METHODS

Study design and participants

Natsal-COVID is a mixed-method study exploring the impact of the COVID-19 pandemic on sexual behaviour, relationships and SRH. Following the Wave 1 web-panel survey, follow-up qualitative interviews were carried out to explore sexuality-related topics

relevant during the pandemic. This paper draws on interviews with 20 of the 311 participants who, in the survey, reported unmet SRH access since lockdown and agreed to recontact. Quotas were applied to ensure variation by age, gender, ethnicity and region. We sought to include a minimum number of participants living in Scotland and Wales, and to oversample women to reflect their higher use of SRH services. Ethical approval was obtained from the University of Glasgow MVLS College Ethics Committee (20019174) and LSHTM Research Ethics Committee (22565).

Data collection

The research team telephoned individuals who agreed to recontact, fell within the pre-specified quotas and provided valid contact details. An introductory call explained the study and confirmed eligibility. Those interested were emailed a study information sheet and given the opportunity to ask questions. Informed consent to participate was sought and recorded prior to interview. Interviews were conducted by three trained qualitative interviewers (DR, KJM and RBP) between 2 October 2020 and 16 November 2020. All interviews were conducted by telephone, lasting 45-90 min. The interview guide explored the context of help-seeking, experiences of attempting to access SRH services, impact of unmet or delayed need, and attitudes and experiences with telemedicine (see online supplemental material). Fieldnotes (summaries and reflections) were recorded after each interview. Participants were offered a £30 e-voucher for their time and contributions.

Data analysis

Audio recordings were professionally transcribed verbatim. Transcripts were reviewed by DR, KJM and RBP for accuracy and familiarity. Identifying details were removed. Data were thematically analysed 16 to inductively identify themes pertinent to policy and practice. Participants' partners' experiences were occasionally related and were included in the analysis. Analysis was aided by NVivo 12 (QSR International), a CAQDAS software. DR open coded five transcripts, which involved inductively labelling data into discrete codes. These codes were reviewed by the analysis team and a draft coding frame was developed via discussion. To maximise coding consistency, DR and RBP double-coded three interviews, clarifying coding uncertainties and discrepancies to develop the final coding framework applied to the data. DR then summarised data from each transcript by category. Differences, similarities and range of experience were identified between and within cases. Interpretations of categories, themes and groupings were made by DR, RBP, KRM and KJM with summary explanations and quotes chosen.

Table 1 Sample characteristics	
Gender	
Women	14
Men	6
Age	
18–29	3
30–39	10
40–49	7
Sexual identity	
Homosexual/gay	2
Heterosexual/straight	15
Omnisexual*	1
Not reported	2
Ethnicity	
Asian	3
Mixed	1
White	16
Region	
England	16
Scotland	3
Wales	1
SRH services	
Condoms and contraception	14
STI test	6
STI follow-up care	2
HIV prevention	1
HIV care	1
Sexual function and gynaecological problems	3
Fertility services	3
Advice or counselling for sexual problems	1
Maternity/antenatal services	4
Cervical screening	3
Outcome†	
Eventually met need	4
Partially met need	6
Unmet need	10

^{*}The sexual attraction to all genders.

RESULTS

Our sample included 14 women and six men (table 1). At the time of interview, 10 participants reported an ongoing unmet need, six had their needs partially met and four had met their needs after some delays. Participants commonly attempted to access more than one service. The most sought services were contraception (n=14), STI tests (n=6) and maternity/antenatal services (n=4). Our analysis is organised under four themes (see table 2 for supporting quotes).

Hesitation and self-censorship

Participants frequently discussed hesitation to use services, often linked to self-censorship of need. Many downplayed their needs relative to others, particularly people with COVID-19, and did not wish to burden an already pressured health system. While several mentioned being okay to postpone seeking health-care, others felt sexual health was less of a priority for service providers during COVID-19 and that they too should de-prioritise it.

I didn't even think it [condoms/STI tests] would be an important subject for them [SRH service], which probably it still might have been, but I think I felt like coronavirus is just ruling everything. (M, 18–29)

Other sources of hesitation to access healthcare included fear of contracting COVID-19 through clinic attendance and fear of healthcare providers' disapproval for being sexually active when contact between households was restricted. One participant who was having condomless sex explained why he did not access condoms and STI testing:

[The clinic staff] might be like "Why would you need that, what have you been doing the last three months?" ... I panicked that what if they contact a service and I get fined. (M, 18–29)

For some participants, hesitation led to inaction. Among those who did seek help, many waited to exhaust other alternatives or until their health needs worsened:

I'd left it for a while anyway, I think I wasn't entirely sure whether it was just a bit of thrush or a urine infection. By the time I figured out that it probably was chlamydia, then trying to get hold of somebody, that all dragged on. (F, 40–49)

Self-censorship did not always precede help-seeking. Several participants started to downplay their needs after encountering barriers to access (e.g., long queues or difficulty booking appointments). They resigned themselves to wait, believing they could 'grin and bear it' and that the effort required would not achieve the expected benefit.

Navigating access to telemedicine and 'socially-distanced' services

Participants found that accessing a healthcare professional took longer or proved harder than expected. Many SRH services were closed, on pause or not accepting referrals. Participants had to navigate inconsistent information, sudden changes to service delivery, new layers of triage and increased gate-keeping. Gatekeepers (i.e., receptionists, nurses, doctors and automated online/telephone systems) denied access or referred onward, depending on availability and the service sought. Typically, walk-in or same-day services were replaced with triage and appointment systems. The increased

[†]Assessed by analyst based on interview.

Original research

Table 2 Examples of participant quotes supporting each theme

Theme

Example excerpt

(1) Hesitation and self-censorship

Minimisation of one's needs in comparison to others

I didn't really want to go to the GP and bother them when other people might need to see somebody more than I do. (F, 18–29)

Hesitation due to concerns about COVID-19

I think I would feel more secure to stay home and not to go to a GP practice with people already ... I guess now I am being more paranoid or more careful. (F, 18–29)

Resignation after encountering barriers

It just got too difficult to get hold of any (of the pill) again, I just gave up, and I thought, this isn't worth it. . . . It was too much effort, you know. (F, 40–49)

I can't get a referral ... I was honestly going around in circles all the time. In the end because I was getting turned away all the time by the ... on phone calls, I'd just think well what's the point, there's no point in me even ringing up. In the end I just suffered on really. (F, 30–39)

(2) Navigating access to telemedicine and 'socially-distanced' services

Incorrect information and contradictory procedures on service access

I'd ring the phone numbers that were on the letters from previous ... if you need to contact us, contact us on this number that type of thing. I'd ring and it would just ring and ring, and ring, and ring. I don't know who to get in touch with. (F, 30–39)

They said you should go and speak to the hospital. (And the hospital said) 'There's no phone appointment, only phone appointments are available in GP'. And GP said 'This is not our department, contraception clinic is not our department, we can't say, we can't do anything, we can't prescribe ... you have to go to hospital and speak to them'. (F, 40–49)

"They kept messing her about saying to her, 'come', then 'don't come', then 'come', then 'don't come' (to have a weight-check before accessing contraception)" (M, 30–39)

Factors facilitating service access

There's a special ward for mums that are having problems. So, it's like am emergency type of thing, so that was quite difficult to access ... we've got family who are doctors, so they know how these work ... So, we were able to understand what the system was like, but I think people who don't have people in the know it must be a lot more difficult. (M, 30–39)

Impact of encountering barriers to service access on choice and autonomy

They sent me two packets of oral contraceptives through the post, which, to be fair, I never took, I just never took. Because that wasn't what I was after, it wasn't what I wanted, I just wanted my coil replaced. My coil has been great ... it helped to level out my mood. ... I just want a new coil. (F, 40–49)

I was left helpless, stuck with menopause symptoms ... it just made me feel like I didn't matter (F, 40–49).

(3) Experiencing telemedicine and 'socially-distanced' services

Privacy during remote/'socially-distanced' consultations

You have to talk through an intercom, from the outside (of the GP). And everybody now knows what's wrong with you, ... it's on the street, as well, so anybody walking past can just hear what you're saying. (F, 40–49)

Accessibility barriers to remote service access

There's always a bit of a delay on the video, and because it's a bit stilted, and because I'm hard of hearing, I can't always lip read. So when they're asking me questions, sometimes, I'm completely in the dark about what they're asking me. (F, 40–49)

Impact of lone navigation of SRH services

As good as all the staff are, if you're getting bad (pregnancy) news in a situation like that it is going to cause you a lot more stress if you don't have someone with you. (F, 30-39)

He feels less involved (in the pregnancy). He's not there to see and hear for himself sort of what's going on. He's having to sit and wait for me to relay everything. (F, 30–39).

Positive experiences of remote/'socially-distanced' SRH services

There were a few silver lining moments. We didn't have to wait that long to go into our appointment, the appointments themselves were a lot faster. We still got the good service from the midwives. (F, 30–39)

They did all the tests there and then, but they had to send them off and then they phoned me, I think, a week later to say that everything was fine apart from the chlamydia which was positive and that they would ... they posted the antibiotics out, so that was quite easy actually, it arrived in the post. (F, 40–49)

Increased comfort during remote appointments

The phone probably is easier because you're not having to look at somebody and you don't get the nervousness ... if you're suddenly kind of face-to-face with somebody that looks quite official, that might make you clam up. (M, 30–39)

(4) Attitudes towards the continuatio of telemedicine

(4) Attitudes towards the continuation Increased convenience of telemedicine

It (telemedicine) would just fit in better with day-to-day life. Because obviously, like modern life, you haven't got a lot of time today now, you don't really want to have to take time sat in a doctor's surgery, you know, just to pick up some pills. (M, 30–39) I would totally like that (remote appointments) because sometimes for a (fertility) treatment you just have to do consent forms that you have to be there present but if they're done online that's hopefully saved or like a few hours of your time. Sometimes just a brief discussion of what the process would be you don't have to go to the clinic or the place. Yeah, these are really welcome changes from my point of view, and my partner as well. (F, 30–39)

Limits to the suitability of telemedicine

I feel like my personal privacy is not at its best at the moment in my current living situation. So, I'd rather nothing of that sort comes (referring to remote appointments or postal delivery). (M, 18–29)

We still need real people to be there and to assess because technology is not necessarily accessible to everybody. (F, 18–29)

need for forward planning was a barrier to several participants, particularly those with children or other caring responsibilities for whom service flexibility facilitated access. Those requiring multiple healthcare interactions (e.g., STI treatment or antenatal services) experienced less difficulty once they were in the system. Participants with more healthcare knowledge and financial resources discussed how these minimised barriers to access. For example, one participant booked 'a private scan that allowed partners to come in' (M, 30–39).

In-person care was notably difficult to access, with one participant describing it as 'impossible'. Some narrated 'hitting a brick wall' that stopped them from accessing services. Others described getting stuck in bureaucratic circles that delayed or prevented their healthcare access. One participant described being shunted like a 'tennis ball between these two departments (the GP and midwifery)' (M, 30–39). These barriers to service access were perceived by many as insurmountable, particularly for those seeking face-to-face appointments, LARC, asymptomatic STI testing or fertility treatments. Even with persistence and tenacity, not all were able to overcome barriers:

I couldn't get in touch with the hospitals because they weren't accepting referrals no more because of the coronavirus. With all the pains I was going through I couldn't get any help whatsoever ... you're kind of just left to suffer. (F, 30–39)

Changes to services reduced participants' sense of choice and autonomy, resulting in some accepting less preferred alternatives. Those seeking contraception for reasons other than preventing pregnancy (e.g., managing menopausal symptoms) felt their needs were deprioritised. Additionally, participants described how they were unable to continue SRH practices they saw as routine or positive, such as asymptomatic STI screening or cervical smear testing.

I'm totally frustrated because everybody should have the same right to be checked ... they should have some period for people who just want to get [STI] tested. (F, 18–29)

Experiencing telemedicine and 'socially-distanced' services

Twelve participants (or their partners) eventually attended the service they required. They described their experiences with services operating under COVID-19 protocols. Under such protocols, telemedicine and 'socially-distanced' healthcare had become a prominent part of service delivery, and services operated under reduced staffing.

These changes sometimes impacted on privacy. Some could not openly discuss their SRH needs during remote consultations within their home, while others discussed being expected to disclose sensitive information in settings that did not feel private (e.g., queuing outside the GP). Additionally, participants navigating telephone appointments discussed negative aspects, such as the difficulty of not knowing when a clinician would contact them and the challenge of having to restart the process if they missed their call-back. Some reported an unwelcome onus on the patient to follow up failed access attempts.

I was driving, I couldn't take the phone call and I think then I had to phone up the next day and I had to go through the same process. (F, 40–49)

Several participants reported that changes to the nature, pace and tone of clinical interactions detracted from their ability to address problems, ask questions or have spontaneous discussions. Participants felt rushed and that their healthcare needs were not well explained. A few felt that staff had less welcoming attitudes, aligning with formal requirements to minimise the risk of SARS-CoV-2 transmission. Many missed the reassurance of in-person appointments, in which they could communicate more easily:

I find them [telemedicine appointments] less personal ... when you're on the phone it's sort of not as easy to remember what you wanted to say, or what you need to ask. (F, 30–39)

The substitution of in-person appointments with remote consultations was experienced as less supportive for those more concerned about their health. Remote consultations were also difficult for people with accessibility needs, such as those with hearing difficulties.

For some, challenges were compounded by having to attend appointments alone without anyone to support them, ask questions or help remember information on their behalf. This concern was most prominent for those navigating fertility or antenatal/maternity services, an SRH need participants perceived as shared. The distress of lone attendance greatly impacted the pregnant partner:

All the times she went into hospital after we knew that there was something wrong, she was there alone, and it took a massive toll on her basically, and she is traumatised basically by that. (M, 30–39)

Lone attendance rules additionally left nonpregnant partners feeling disengaged, uncertain and less equipped to emotionally support their pregnant partner.

Some changes were experienced positively. A few participants noticed staff making extra efforts to be friendly and reassuring, to 'make up for some of the other things that people are having to deal with' (F, 30–39). Many participants discussed the benefits of experiencing a combination of telemedicine and in-person care, which included shorter appointments and waiting times, less crowded waiting areas, and the convenience of postal delivery of medication such as contraception or antibiotic treatment.

Attitudes toward the continuation of telemedicine

Many viewed the ongoing implementation of telemedicine, if used to complement in-person services, as potentially adding quality. One participant commented that 'a lot of things could be resolved without needing a face-to-face consultation' (F, 40–49). Participants felt telemedicine could bring convenience to triaging,

referrals, information giving and postal medication delivery:

I'd be more comfortable with a telephone appointment, as long as it was on a Friday and the children weren't around ... And if somebody could just send a prescription to my doctor, or to the pharmacy, so that I could collect my tablets there, then it would be fine. I don't really need to see anybody. (F, 40–49)

Telemedicine could allow people to save time and money normally spent on childcare or travel. Many appreciated being able to discuss sensitive health needs at home, a familiar and non-clinical environment. Telephone (but not video) appointments lessened perceived concerns about the stigma of accessing SRH services. Those critical of telemedicine worried that it would duplicate consultations or result in burdensome arrangements where calls were not returned and phone line staffing was variable. Several participants worried that explaining symptoms, physical examination and testing may be impossible remotely. Additionally, some highlighted that telemedicine would not work for them given their accessibility needs and requirements for privacy.

I prefer the contact, personal contact with somebody ... I used to have phone anxiety in the past, so that's why I prefer in person contact. (F, 18–29)

DISCUSSION

These findings complement previous research on how the COVID-19 pandemic has disrupted and impacted SRH, ¹² ¹³ ¹⁷ highlighting how unmet or delayed need might have resulted in worsened SRH outcomes, undermined reproductive choice, weakened preventive practices and increased distress over SRH. Participants faced barriers due to changing regulations regarding healthcare access, inconsistencies between and within services, the pausing of various services and difficulties navigating remote healthcare. Consequently, participants required health literacy and tenacity to access SRH services, which raises concerns about the amplification of pre-existing health inequalities given the social patterning of health literacy¹⁸ and existing barriers to SRH access. ^{20–23}

Telemedicine represents perhaps the most significant adaptation rapidly deployed by providers to mitigate the pandemic's effects on healthcare. Our findings highlight how its ongoing deployment will require careful implementation to minimise barriers to access and enhance patient convenience. This study provides detailed qualitative evidence of the mixed picture concerning its acceptability and suitability. Corroborating wider research on adults' experiences of SRH telemedicine, ^{3 5 24 25} some Natsal-COVID participants held positive attitudes about its continuation, especially when complementing in-person care. This differs from findings among young people who

hesitate to access remote SRH care. 13 26 27 However, our participants were less satisfied with telemedicine during more sensitive and emotional consultations, highlighting limits to remote provision.²⁸ This differs from findings on tele-abortion (an especially sensitive SRH service), with which participants reported satisfaction. 4-6 Considering privacy and anonymity of SRH patients is crucial. 20 26 29 Some participants worried that telemedicine might alert others in their household or community to their SRH needs. However, research has also highlighted the potential for telemedicine to promote privacy and anonymity in certain contexts such as abortion care.²⁴ Given their varying needs and preferences, our data provide evidence that SRH patients should have the option of in-person, overthe-phone or video appointments to meet varying needs and preferences. This will require investment in training and equipment to ensure high-quality remote services.30

Strength and limitations

We purposively interviewed participants who had tried but failed to access services and varied by age, gender, ethnicity and region. We included participants across Britain. However, a majority of these lived in England. This limits our ability to comment on differences in experiences across England, Scotland and Wales as each country has its own National Health Service system. Our enquiry followed a holistic framework of SRH spanning a wide range of services. Our approach provides insight into diverse experiences but limits our ability to comment in depth about specific SRH services or about services our participants did not have direct experience of, such as abortion and sexual assault services. Our study was unable to explore in depth the impacts of delayed access to specific services. Given the time between reporting of help-seeking and interview, we could not exclude potential for recall bias. This study aimed to highlight challenges and participants were recruited accordingly. Thus, the results likely under-represent positive experiences and downplay provider staff's enormous efforts during this challenging time. Given participants' digital recruitment, we may not have captured experiences of those without access to remote services, for example, due to language barriers, learning difficulties or socioeconomic factors. Finally, as with all qualitative research, our study draws on a small sample to capture a range of experiences of SRH access; it is not intended to be generalised or quantified.

CONCLUSION AND RECOMMENDATIONS

Demand for services may increase due to a backlog of delayed help-seeking and the possibility of increased compensatory risk behaviours post-pandemic. Our study provides a general population perspective to complement service-user studies and quality improvement studies, offering recommendations for future

Table 3 Recommendations			
Service delivery aspect	Preliminary recommendations suggested from the data	Link to theme	
Recovery phase	In encouraging re-engagement with services, reassure patients of the legitimacy of their needs and staff non-judgemental attitude. This applies particularly to those reporting risk behaviour during the pandemic the longer term — and once initial backlogs are cleared — targeted campaigns may be required to encour re-engagement with cervical screening or asymptomatic STI testing and training for providers.	1	
	Review gatekeeping functions established during the pandemic to ensure remaining triage systems do not create additional barriers for patient access.	2	
Innovations to 'usual practice'	Cautiously adopt telemedicine where it can enhance convenience and enable prompt testing, diagnosis and treatment responsiveness. It should be considered in addition to face-to-face services. Effort will be required to avoid telemedicine's unnecessary bureaucratisation, duplication or the creation of added barriers to patient access. It will be crucial to avoid exacerbating inequalities in access and digital exclusion.	4	
	Patient preferences for telephone, video or in-person consultation should be respected where possible, as needs, preferences and concerns vary.	3 and 4	
	Ensure gatekeepers are aware of their role within a triage system so that they can supply patients with as much accurate, up-to-date and reassuring information as possible.	2	
Service delivery during a pandemic	Prioritise cross-sector collaboration to avoid confusion over triage, particularly between pharmacies, GPs and specialist SRH providers.	2	
	Set up agile and accessible mechanisms for sharing learning and good practice. The COVID-19 resources and regular meetings established by the British Association of Sexual Health and HIV (BASHH) are a good example of this.	ALL	
	Ensure that information (eg, booking systems, opening hours) is continuously updated to avoid confusion for patients.	2	
	Allow patients to be accompanied during pregnancy/antenatal services, during other emotionally demanding appointments, or to help with access needs (eg, language, disability, vulnerability) wherever possible.	3	
	Establish safe ways to help patients feel comfortable in clinic to compensate for measures such as masks or socially distanced consultations. Small gestures (such as a warm greeting) may be 'quick wins' reducing stress both for the patient and professional and ensuring a more personable service.	3	
	Continue with remote provision where possible, practicable and acceptable, ensuring staff are appropriately trained and supported to provide it.	4	

practice derived from actual and potential patients in the community. Based on our qualitative data and in discussion with the study team and clinical colleagues, we set out a draft set of recommendations for consideration by service providers and policymakers (table 3). These recommendations link directly to the data and represent experience-learning from this unprecedented period to support a strong recovery, innovative and streamlined services in future, and resilience during future pandemics. However, implementing these recommendations must centre on the well-being of NHS staff, on whom the pandemic has taken a significant toll. Long-term adequate investment is crucial to safeguard staff and patient well-being.

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Data availability statement Data are available in a public, open access repository. Data are available upon reasonable request. Natsal-COVID qualitative interview data are available upon request from researchers. If interested, please contact kirstin. mitchell@glasgow.ac.uk. Quantitative data from this study are available from the UK Data Archive under safeguarded access, DOI: 10.5255/UKDA-SN-8865-1.

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REFERENCES

- 1 FSRH. FSRH COVID-19 SRH Service Survey interim results 07 May 2020, 2020. Available: https://www.fsrh.org/ documents/covid-19-fsrh-survey-interim-results-07-may-2020/
- 2 BASHH. COVID-19 Clinical Thermometer Survey Third Round Results Snapshot (September 2020), 2020. Available:

- https://members.bashh.org/resources/Documents/Covid-19/BASHH%20COVID-19%20Clinical%20Thermometer% 20Survey%20-%20Third%20Round%20Results% 20Snapshot%20Sept%2020.pdf
- 3 Aiken A, Lohr PA, Lord J, *et al*. Effectiveness, safety and acceptability of no-test medical abortion (termination of pregnancy) provided via telemedicine: a national cohort study. *BJOG* 2021;128:1464–74.
- 4 Porter Erlank C, Lord J, Church K. Acceptability of no-test medical abortion provided via telemedicine during Covid-19: analysis of patient-reported outcomes. *BMJ Sex Reprod Health* 2021;47:261–8.
- 5 Boydell N, Reynolds-Wright JJ, Cameron ST, et al. Women's experiences of a telemedicine abortion service (up to 12 weeks) implemented during the coronavirus (COVID-19) pandemic: a qualitative evaluation. BJOG 2021;128:1752–61.
- 6 Reynolds-Wright JJ, Johnstone A, McCabe K, et al. Telemedicine medical abortion at home under 12 weeks' gestation: a prospective observational cohort study during the COVID-19 pandemic. BMJ Sex Reprod Health 2021;47:246– 51
- 7 Public Health England. The impact of the COVID-19 pandemic on prevention, testing, diagnosis and care for sexually transmitted infections, HIV and viral hepatitis in England, 2020. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/943657/Impact of COVID-19 Report 2020.pdf
- 8 Scottish Government. Reset and rebuild: a recovery plan for sexual health and blood borne virus services; 2021.
- 9 Hall KS, Samari G, Garbers S, et al. Centring sexual and reproductive health and justice in the global COVID-19 response. *Lancet* 2020;395:1175–7.
- 10 World Health Organisation. Defining sexual health: report of a technical consultation on sexual health. 28-31 January 2002, Geneva, 2006. Available: https://www-who-int.ezproxy.lib.gla. ac.uk/reproductivehealth/publications/sexual_health/defining_sexual_health.pdf
- 11 Dema E, Copas AJ, Clifton S, *et al*. Methodology of Natsal-COVID wave 1: a large, quasi-representative survey with qualitative follow-up measuring the impact of COVID-19 on sexual and reproductive health in Britain. *Wellcome Open Res* 2021;6:209.
- 12 Dema E, Gibbs J, Clifton S, et al. Initial impacts of COVID-19 on sexual and reproductive health service use and unmet need in Britain: findings from a large, quasi-representative survey (Natsal-COVID). SSRN 2021.
- 13 Lewis R, Blake C, Shimonovich M, et al. Disrupted prevention: condom and contraception access and use among young adults during the initial months of the COVID-19 pandemic. An online survey. BMJ Sex Reprod Health 2021;47:269–76.
- 14 Howarth AR, Saunders J, Reid D. 'Stay at home ...': exploring the impact of the COVID-19 public health response on sexual behaviour and health service use among men who have sex with men: findings from a large online survey in the UK. Sex Transm Infect 2021.
- 15 Davies B, Cousins D, Lomax N. Impact of COVID-19 on access to sexual health clinics for patients 18 years old and under. HIV Med 2021:51.
- 16 Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3:77–101.
- 17 Castanon A, Matejka RM, Pesola F. The impact of COVID-19 disruption to cervical cancer screening in England on excess diagnoses. *medRxiv* 2020.

- 18 Roberts J. Local action on health inequalities improving health literacy to reduce health inequalities 2015;59 https://www.gov. uk/government/publications/local-action-on-health-inequalitiesimproving-health-literacy
- 19 Middleton A, Pothoulaki M, Woode Owusu M, *et al.* How can we make self-sampling packs for sexually transmitted infections and bloodborne viruses more inclusive? A qualitative study with people with mild learning disabilities and low health literacy. *Sex Transm Infect* 2021;97:276–81.
- 20 Bender SS, Fulbright YK. Content analysis: a review of perceived barriers to sexual and reproductive health services by young people. *Eur J Contracept Reprod Health Care* 2013;18:159–67.
- 21 Ezhova I, Savidge L, Bonnett C, et al. Barriers to older adults seeking sexual health advice and treatment: a scoping review. Int J Nurs Stud 2020;107:103566.
- 22 Hibbert MP, Wolton A, Weeks H, et al. Psychosocial and sexual factors associated with recent sexual health clinic attendance and HIV testing among trans people in the UK. BMJ Sex Reprod Health 2020;46:116–25.
- 23 Nellums LB, Powis J, Jones L, et al. "It's a life you're playing with": a qualitative study on experiences of NHS maternity services among undocumented migrant women in England. Soc Sci Med 2021;270:113610.
- 24 Kerestes C, Delafield R, Elia J, *et al*. "It was close enough, but it wasn't close enough": a qualitative exploration of the impact

- of direct-to-patient telemedicine abortion on access to abortion care. *Contraception* 2021;104:67–72.
- 25 Endler M, Lavelanet A, Cleeve A, et al. Telemedicine for medical abortion: a systematic review. BJOG 2019;126:1094– 102.
- 26 Garrett CC, Hocking J, Chen MY, et al. Young people's views on the potential use of telemedicine consultations for sexual health: results of a national survey. BMC Infect Dis 2011;11:285.
- 27 Rose SB, Garrett SM, McKinlay EM, et al. Access to sexual healthcare during New Zealand's COVID-19 lockdown: crosssectional online survey of 15-24-year-olds in a high deprivation region. BMJ Sex Reprod Health 2021;47:277-84.
- 28 Kincaid R, Estcourt C, Gibbs J. Do GBMSM's preferences for in-person, telephone or digital sexual healthcare vary according to health concerns and symptoms? A cross-sectional survey. Sex Transm Infect 2021;97:A136
- 29 McKeown E, Doerner R, Nelson S, *et al*. The experiences of ethnic minority MSM using NHS sexual health clinics in Britain. *Sex Transm Infect* 2012;88:595–600.
- 30 Lunt A, Llewellyn C, Bayley J, *et al.* Sexual healthcare professionals' views on the rapid provision of remote services at the beginning of COVID-19 pandemic: a mixed-methods study. *Int J STD AIDS* 2021;32:1138–48.

Natsal Covid-19 study. Qualitative Interviews Topic Guide

GROUP TWO: Participants with unmet SRH needs

INTRODUCTION

- Ensure participant has read the Participant Information Sheet and consent form
- Explain the study purpose and confirm permission for digital recording.
- Reiterate re data confidentiality and storage/use of data
- Remind participant that we do not have access to their survey responses and so may end up covering some similar ground in this interview
- Offer to answer any questions (repeat this offer at the end of the interview as well).
- Remind participant that they are not obliged to answer questions and can end the interview at any time.
- Since Covid a lot of people have been spending more time at home. Talking about health and
 relationships can be quite personal. Do you have any concerns about family, partners or
 friends overhearing you? Is there somewhere in your home where you can talk privately /
 you feel comfortable talking about these topics?
- If the connection should fail for any reason, I will call you back. Please wait for me to call you.

RECORD verbal consent

- Have a first audio recording at the start of the interview where people state their name and that they say that they have consented over email and are happy to take part.
- o Start a second audio recording for the interview itself.

Socio-demographic and lockdown arrangements

- Confirm:
 - o age
 - o gender
 - ethnicity
 - sexual orientation
 - o region (SE England, SW England, Midlands, North England, Wales, Scotland)
 - o location (rural, peri-urban, urban)
 - o current partnership and family status (any children; their ages and current location)
 - occupation (public facing, continued, homeworking, furloughed, unemployed).
- Ask about household in which they were locked down:
 - number of others in household; gender, age, occupation (public facing, continued, homeworking, furloughed, unemployed)
 - o relationship to others in household;
 - o details of any moves from one HH to another over period of full/partial lockdown

Views on Covid-19 and social restriction measures

- What are your thoughts on Covid-19?
 - Feelings about whether social restrictions are justified or not
 - General level of concern and nature of concerns (re virus itself, economy, wellbeing, impact on health services and education, concerns about friends/relatives)

Perceived risk or experience of covid-19 to self and others in the household?

Covid-19 and personal life

Covid-19 has changed life for many people. What do you see as the most important gains and losses (or positives and negatives) for you?

Let participants speak and use the bullet point below as probes. Ask whether changes are perceived as positive, negative, both.

- o Additional time on hands/less time
- o Changes to financial situation
- o Changes to living arrangements
- Changes to family life/caring responsibilities
- o Changes to mental and physical health?
 - Mental wellbeing <u>Changes to exercise, diet</u>, smoking, drinking etc.
 - Changes to social life (more or less interested in interacting with people you are close with (friends/family/others)? What has that meant in practice for your interaction with them? (prompt: in person/online?)

Sex and relationships in general

I'd like to ask you a bit about your sex life/sexual relationships more generally. We may have covered some of this already but I'd just like to check in. As a reminder you don't need to answer anything you feel uncomfortable

- Has your sex life changed since March?
 - o (probe: satisfaction, thoughts and feelings, partnered activity, enjoyment, online activities, new practices or partners, frequency, anxiety, risk, pressures)
- How do you feel about these changes?

Unmet sexual health needs

In the next section we will talk about your experiences of trying to get a range of sexual and reproductive health services. These are things that you might have considered, tried to get, accessed through different means than usual, or which you may have had problems getting since the beginning of lockdown.

I'm going to read out a list of services. Let me know if any are relevant to you and if you would be happy to discuss them.

While it is useful to our research, you don't have to talk about anything you feel uncomfortable about and we can also stop and move on to something else at any time.

- Condoms and contraception
- STI testing and care
- HIV prevention and treatment
- Fertility services/advice
- Maternity/antenatal services
- Cervical screening (smear test/pap test)
- Abortion/Pregnancy termination services
- Advice or counselling for sexual problems

- Relationship support services/advice
- Sexual assault/rape support services or helplines

Were there any other sexual or reproductive health services that I haven't mentioned that you thought about or tried to access since lockdown began? Would you be happy to talk about them? (list and not if happy to discuss)

Questions on services considered, sought, used, not used or alternatives used.

(make sure you come back to any services above considered relevant and happy to talk about)
You mentioned were/was relevant to you since the beginning of lockdown. Can you tell m what was going on for you during that time?
I'd like to talk in detail about your thought processes and the steps you took (or didn't take)
Probes.

Before seeking help

- Please tell me a little about the situation that led you to want to seek a service (probe for severity/urgency of need)
- Have you sought help previously for this need? (if yes, please tell me briefly about your past
 experiences of getting this help and feelings about that)
- Which particular service(s) did you consider and why? [reasons for discounting other services]
- Did you talk to anyone or get advice or look up anything online prior to seeing formal help?
- What expectations did you have about how easy or difficult it would be to access the service?
- Prior to accessing/attempting to access the service, did you have any concerns? Or thoughts about what might happen if you didn't get the service?
- What other things did you do or consider doing before or alongside seeking formal help? (informal sources of support, ignoring problem etc)
 - O What happened; how did you feel about what happened?

Attempting to access formal help

- Please tell me about the process of trying to access help/service/commodity: How did you try to get [the service]?
 - Probe for the process of seeking help (e.g. getting in contact with services; finding out information; process of setting up appointment; delays – waiting times; alternative routes for getting service.
 - o Did anything make it harder for you to access the service? What was this?
 - Did anything make it easier for you to try to access the service? (e.g. other sources of help)
 - What actions were you able to take yourself? Anything that you wished to do that you weren't able to?
 - If help-seeking unsuccessful, what other things did you do or consider doing? (e.g. informal help, changing behaviour, finding other ways of coping)
 - Did these difficulties in attempting to access help have consequences for you in terms of your sex life/relationship?

 If previously sought help for this issue, what are the key changes to accessing services that you noticed and how did you feel about them?

Experiences and feelings about getting formal help (for P who did get help)

- Please tell me about your experience of receiving help? (desired level of support received?
 Sense of agency/autonomy, choice/options, efficiency, convenience, quality)
- If **telemedicine** accessed: how did you feel about phone/video contact? (likes, dislikes; benefits, drawbacks) How would you feel about these services becoming standard practice in future?
- If previously sought help for this issue, what are the key changes to receiving/experiencing services that you noticed and how did you feel about them? (changes to: desired level of support received? Sense of agency/autonomy, choice/options, efficiency, convenience, quality)
- Were there any changes to [the service] during lockdown that worked well for you?
 - Would you keep any of them in the future?
- Were here any changes to [the service] that didn't work for you? What were they?
- Did these changes (if any) to service provision (e.g. delays) have consequences for you in terms of your sex life/relationship?
- If you could make any changes to [the service] what would these be? (probe for both during a pandemic, and in the longer-term)
 - o Is there anything that could make it work better for you?
 - If they are struggling to come up with ideas offer prompts of things they might want changed: ways of contact the service, seeing a different staff or role (e.g. nurse of doctor), staff attitude, waiting times, location of service, in person or telemedicine, staff knowledge, costs, time.

If no service/help accessed:

- Can you tell me how (ignoring, delaying, not getting or using an alternative) service has affected you since lockdown began? (probe for negative and positive effects on health, sex and sex drive, well-being, relationships, economic/resources and social effects).
- Do you think this has been a common experience for other people in your situation?
- Do you have any thoughts about how the government could make SRH services more easily accessible during a pandemic? What about more generally in future?

Before we finish, I'd just like to ask you some general questions (also for respondents with few services considered, used or unmet)

- How do you feel about sexual and reproductive health services that are provided online or through telephones?
 - I'm thinking about things such as ordering condoms or STI tests by mail for postal delivery, filling in health checks online and consultations with health professionals or counsellors by telephone or by video? It might also include text reminders as well as phone apps and devices that might send information to medical professionals
- First can I check whether you have experience of using any online or over the phone SRH services before the covid lockdown? Can you tell me about that (type of service used and feeling about experience)

- If no experience of telemedicine: What do you feel would be the drawbacks and benefits of telemedicine for your personally?
- For both: How would you feel about a general move towards telemedicine or services provided online in future? (which aspects are acceptable/desired; ideas on best/most appropriate modes of delivery)
- It has been suggested that other venues could be used to deliver some services, for example pharmacies, maternity and abortion services. How would you feel about using these?
 - What other services / venues would you be happy using for SRH services / advice?
 - Have there been changes to sexual health services resulting from lockdown that you have liked and would like to see continued or expanded?
 - What makes you say that?
 - Is there anything that you think might make accessing services in these ways easier/harder?

Wrap-up question

- Thinking about covid and the current situation, what do you think life will look like in a year's time?
 - o (prompt) Do you think life will have gone back to "normal"?

END INTERVIEW:

- Thank participant;
- Ask if they would like to be informed about the outcome of the project if so ask them for an email address to add to the participant findings mailing list;
- Reiterate re data storage and use;
- Ask if any questions