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Contraceptive and pregnancy concerns in the UK during the first COVID-19 lockdown: A rapid study

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ABSTRACT

Objectives: COVID-19 resulted in significant disruption to sexual and reproductive health (SRH) services globally and the impact of this remains under explored. This study aimed to explore the impact of COVID-19 on SRH during the initial weeks of the first UK lockdown.
Design: This rapid study employed a cross-sectional anonymous survey design. Between 9th April and 4th May 2020, participants completed an online questionnaire around the impacts of COVID-19 on SRH. The survey was completed by 194 participants. The findings in this paper, report on data from closed and free text questions from 32% (n = 62) of the total sample who said they were able to get pregnant.
Results: Participants raised concerns around reduced access to, or a denial of, SRH services as well as reduced choice when such services were available. Participants felt their right to access SRH care was impinged and there were anxieties around the impact of COVID-19 on maternal and foetal health.
Conclusions: The study contributes to a better understanding of the concerns, during the first 8 weeks of the UK lockdown, of those who could get pregnant. Policy makers and planners must ensure that SRH policy, that recognises the importance of bodily autonomy and rights, is central to pandemic planning and responses both in the UK and globally. Such policies should ensure the immediate implementation of protocols that protect SRH service delivery, alongside informing service users of both their right to access such care and how to do so. Further work is necessary with members from minority communities who are mostly absent from this study to explore if, and how, COVID-19 may have exacerbated already existing disparities.

Introduction

The WHO characterized COVID-19 as a pandemic on the 11th March 2020 due to the rapid international spread. On the 23rd of March 2020, the UK entered the first COVID-19 lockdown. While the focus has remained on controlling the epidemic, infection levels and death rates, the impact on other healthcare issues requires consideration[1]. These impacts potentially influence wider health conditions and challenge the delivery of services including sexual and reproductive health (SRH)[2]. As well as global challenges related to manufacture and distribution on contraceptives[3], other national issues immediately became clear. Services rapidly transformed, but disruption to SRH services were reported including service closures, reduced ability to care for vulnerable groups and difficulties with long-acting reversible contraception (LARC) provision [4]. There was confusion around abortion policy, whereby initially, it appeared that the government temporarily changed the rules surrounding abortion, enabling pregnant people to manage medical abortions at home. However, this amendment was swiftly withdrawn. This withdrawal was followed by yet another change, where the Department of Health and Social Care confirmed there would in fact be a temporary amendment to abortion policy to enable at-home abortion in England [5]. At this time little was known about the maternal impacts of COVID-19[6].

It has taken time for the impact on SRH of other more traditional emergencies, such as conflict and natural disasters to be recognised[7]. Early in the pandemic, commentaries highlighted the potential impacts of COVID-19 on SRH[8,9]. There is limited evidence from high income countries around SRH needs and readiness during disasters. However, research examining the effect of Hurricane Katerina reports unintended pregnancies, a lack of access to family planning services and increased risk of adverse postnatal mental health outcomes for those most effected [10,11]. Evidence from other emergencies in Low to Middle Income

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Countries (LMiC) however, is more widespread due to greater exposure to emergency contexts, demonstrating that reduced access to SRH services can increase the number of people affected, generating a high risk of "mortality or morbidity due to pregnancy-related causes; unintended or unwanted pregnancies due to lack of information or access to contraceptive services; complications related to unsafe abortions; sexual and gender-based violence; and an increased incidence of sexually transmitted infections, including HIV"[2pg2]. Thus, continued access to SRH enhances reproductive autonomy[1], reduces unintended pregnancies, impacts both individuals' and family's lives, and affects health, empowerment, and well-being, particularly in times of crisis[12]. Ultimately the provision of quality SRH services, is not just critical but lifesaving[13]. The ability of nations to provide continued access to SRH care depends on the baseline stability of the healthcare system, unintended pregnancy rates, local COVID-19 rates, alongside state support [14]. During public health emergencies scientific knowledge is key to situational awareness with the best-available evidence drawn on to support decision making[15]. Therefore, whilst differences exist between LMiC and higher income countries, particularly around stability of healthcare systems, evidence from LMiC where the evidence base is wider, can be utilised alongside more limited comparable evidence. During emergencies including the COVID-19 pandemic, such evidence demonstrates that SRH is a universal right and necessity[16,17].

Empirical evidence around SRH concerns during the COVID-19 pandemic in the UK and globally remain limited. However, preliminary findings are emerging, highlighting the disruption to services, challenges to accessing care, the self-censorship of SRH needs due to confused messaging and COVID-19 anxieties related to pregnancy or the postpartum period[18–21]. Data collected as we move through the pandemic but reflecting on the lockdown period, suggests that many people accessed SRH care during the initial lockdown, however young people and those reporting sexual risk behaviours reported difficulties in accessing services[22]. This article presents unique data collected during the early days of the first UK lockdown exploring concerns around pregnancy and accessing contraception at this time. Our aim is not to quantify disruption, but to demonstrate some of the SRH concerns during the early stages of the pandemic. Understanding these concerns can inform appropriate healthcare planning and response in relation to SRH in disease outbreak or other crisis situations.

Method

Public health emergencies require evidence-making and decision-making that can flex with the rapidly evolving situation where evidence and response occur interchangeably; the benefits of rapid research in such contexts are now widely established [23,24]. Rapid research can serve multiple purposes including acting as a preliminary study to inform future work, as a short study exploring questions from earlier work, in tandem to a longer study, or as a stand-alone study[25]. Between April 9th 2020 and May 4th 2020 we conducted a rapid study[26] intended as both a preliminary study to inform future work and as a stand-alone study to capture initial concerns using an online survey hosted by the Qualtrics platform. The aims were twofold, first to explore the early impacts of COVID-19 on sexual practices and issues around sexual and reproductive health in the UK, and second to provide preliminary data and an evidence base to guide further research in this area. This rapid approach enabled the key concerns among the community to be gathered to produce actionable findings in a greatly compressed time frame. The survey recruitment period fell during 6 of the first 8 weeks of the UK lockdown, a social situation never to have been experienced before. Thus, the dataset discussed here, provides unique data captured during this unprecedented time around participants initial concerns.

Participants had to meet the following inclusion criteria:

- Age 16+
- Any nationality, so long as they have been in the UK since the WHO declaration of pandemic on 30th January 2020 without leaving.
- British citizens who normally reside in the UK, but who might have been away on holiday since the WHO declaration of pandemic on 30th January.

Convenience sampling was used to recruit using digital means only due to UK lockdown constraints. Convenience sampling is a form of non-probability sampling commonly used for population and clinical research, and to recruit to studies in disaster affected areas where it is often not possible to engage in data collection with the entire population [27].

The research team worked with NGO organisations that delivered or promoted sexual and reproductive health to promote the survey which was advertised via social media accounts and other personal and professional networks. The landing page of the survey contained the participant information sheet and consent processes. Participants had to tick a box to consent. If they did not consent, the survey was not displayed. Ethical approval was granted by the Faculty of Health, Psychology and Social Care ethics committee at MMU (Ethos number: 22022). No identifying information was collected or stored.

A validated tool for the impact of COVID-19 on SRH was unavailable, so the survey was developed and tested by the study team alongside other stakeholders. The questions were pragmatically developed to address the study aims and considered previous evidence around SRH in crisis situations. The survey contained open and closed questions. There were 8 sections: sexual practices before COVID-19; sexual practices during COVID-19; sexual and reproductive health and services; treatment and service impacts for participants who were living with HIV; impact on sex workers; perceptions of COVID-19 transmission; access to sexual health information under lockdown; demographics. The data in this paper only reports on the section covering sexual and reproductive health services from participants who indicated they could get pregnant[2]. Analysis of the quantitative data was performed using SPSS. Descriptive statistics were used to describe and summarise the data highlighting the basic features of the study. Open ended questions were analysed using thematic analysis to identify key themes[28].

Results

343 people consented to take part, of these, 186 (54.2%) completed the full survey. However, several participants completed at least 90% before terminating, they are included giving the total number of participants as n = 194, (56.6% of those who consented to take part). This paper focuses on participants who indicated they were able to get pregnant, 32% of the overall sample (n = 62). The demographic make-up of participants can be seen in Table 1. Most participants were aged between 25 and 39, many but not all identified as a woman, approximately half the sample defined as heterosexual, most were white and without a disability.

Approximately 50% of those who could get pregnant had concerns about accessing and managing their SRH in relation to pregnancy prevention or conception, see Table 2. Similarly, Table 3 demonstrates that approximately 50% had concerns about COVID-19 if they were to

[1] Reproductive autonomy refers to having power and control over pregnancy, child-bearing and contraceptive use.

[2] The analysis of data from participants who could get pregnant is the focus of this paper, as the overall sample of the survey was made up mostly of 2 groups; first, people who identified as getting pregnant and second, as men who have sex with men. Given the different characteristics and needs of these groups, we have isolated those who could get pregnant to discuss their pregnancy and contraceptive related concerns are these were less relevant for much of the rest of the sample.

Table 1
Demographics of respondents.

Variable	Frequency
Age Group	
19–24	8
25–29	18
30–39	26
40–49	9
Unknown	1
Gender	
Woman (inc trans woman)	55
Man (inc trans man)	1
Non binary	4
Woman/ non binary	1
Unknown	1
Same gender identity as at birth	
Yes	55
No	5
Unknown	2
Sexuality	
Bisexual	18
Heterosexual	32
Unsure	1
Queer	3
Lesbian	4
Asexual	1
Pansexual	2
Unknown	1
Relationship status	
Yes	42
No	16
Unsure	3
Unknown	1
Ethnicity	
Black	3
Mixed	4
White - British + Irish	44
White - Other	9
Unknown	2
Disability	
Yes	13
No	48
Unknown	1

Table 2
Reproductive health related concerns.

Question - Do you feel that Covid-19 may lead to any of the following (please tick all that apply)	%	n
Difficulty in accessing the contraceptives you need	35.4	23
Getting pregnant by accident	7.7	5
Challenges in accessing abortion services	30.8	20
Difficulty in accessing fertility services	20.0	13
None of these things for me	47.7	31

Table 3
Pregnancy related concerns.

If you are pregnant or were to become pregnant are you concerned about the impact of Covid-19 on your unborn baby?	%	n
Yes	44.6	29
No	44.6	29

become pregnant. The open-ended questions provided depth to the descriptive statistical data and 3 key themes emerged; access and choice; uncertainty and anxiety in pregnancy; and the de-prioritisation of SRH.

Access and choice

Participants reported a perceived or actual reduction in choice or access to, contraceptive, fertility, prenatal and abortion services. The shift to remote care raised concerns about accessing care that previously necessitated a face-to-face appointment: "*I've only ever received contraception via face-to-face appointments, normally annually, where I am weighed, and blood pressure taken etc. I am unsure whether I would be able to still get the pill.*" Closure of services and disruption to supply chains were also noted; "*If the clinic closes completely, I can't access free condoms.*"; "*Shortages in stores of condoms and lube were an early concern.*" Other participants reported reduced contraceptive choice, "*Access to LARC basically stopped.*" This reduction in access and choice created anxieties around accidental pregnancy, "*I fell pregnant last year when forgetting to book my injection and am worried I will be unable to get an injection again if this carries on.*" Other logistical challenges resulted in a reduction of choice or reduced access to services such as "*Restrictions around travel*" meaning that potential service users "*Can't go to pharmacies or clinics.*" Quite simply, "*Because you can't go out!*" during the lockdown period reduced access to contraception and other SRH services during the early days of the pandemic.

Reduced access to abortion services alongside the handing of legislative changes to abortion care during COVID-19 were raised as concerns, "*I'm worried about access to abortions given the lock down. Legislation around at home abortions has changed and isn't really being talked about in the media.*"; "*Because there is to-ing and fro-ing about using abortion pills at home and limited access to services/huge queues to contact some services, could result in delays and inability to receive referral for abortion if it was needed.*" Additionally, the lack of choice around care once accessed was raised:

> *I also fear that if I were to need an abortion, I would have no option but to have a medical one, which terrifies me - I have had a surgical one before and been fine with that but I am very afraid of being denied that because of the understandable wish to limit people being in care facilities unless absolutely necessary.*

Whilst many participants were looking to prevent pregnancy, some were looking to facilitate conception, with 20% of the sample expressing concerns around accessing fertility services. Participants reported a denial of services, such as "*Fertility services have stopped*"; "*the NHS has limited capacity; I already know someone who will not be able to access IVF … due to Covid.*" For those who had already conceived, a lack of choice in care received, changes to locations of care and no option for a partner to be present were experienced "*We had IVF just before they stopped the services. …. no partners allowed.*" There were worries about accessing prenatal and maternity care, *"[I am] Not confident that I'd be able to access healthcare needed.*"; "*I was planning on trying for a baby but accessing antenatal care might be a challenge right now.*" Participants also reported a worry around a lack of choice in prenatal and maternity care "*Not being able to have choice in birthing practices I.e. home birth partner present at birth.*"; "*the virus has changed how babies are delivered and how mothers and babies are cared for in medical settings.*"

Uncertainty and anxiety in relation to pregnancy

For some participants, the uncertainty of COVID-19 during pregnancy was raised as a concern in the free text boxes; "*Unknown if COVID 19 could cause problems to a developing foetus*"; "*Just the unknown really*"; "*We don't yet know how COVID-19 affects babies being carried by parents who are infected.*" Participants discussed the potential impacts from emerging evidence "*some recent preliminary research suggested that covid19 could have an impact during pregnancy.*" Thus, understandably, a key pregnancy-related worry was around the health of the foetus, the baby (once born), and to the mother; "*I would be concerned of any lasting effect the virus may have on the development of the foetus, …[and] after a child was born.*"; "*Could be life threatening for the baby*"; "*I'd be concerned on how the virus impacted my health, and therefore the health of the unborn child.*" There were also worries about miscarriage "*I am worried I'll get it and miscarry*". As well as maternal physical health there were anxieties

about mental health and the impact of isolation; "*I would self-isolate massively and not go into shops at all. … I would be worried about my mental health and not seeing friends and other pregnant women to share the experience of pregnancy with*." This uncertainty meant that some participants stopped trying to conceive, "*Would like another baby now but postponing due to uncertainty of Covid-19*."

De-prioritisation of sexual and reproductive health care

Participants described a "*strain on services*" due to COVID-19, alongside a "*wish to limit people being in care facilities unless absolutely necessary*." Participants expressed uncertainties about the availability of SRH care; "*If I need reproductive health services (abortion, IUD) the health care system in my area may be too overwhelmed for doctors to help me*." Responses articulated how care was perceived along a hierarchy of importance, with SRH care de-prioritised; "*All of antenatal care feels like it would be disregarded as less important"; "non-essential care is limited, or people view it [SRH] is limited, as care of Covid-19 patients takes priority*."

Discussion

Concerns were raised by participants in our study about the impact of COVID-19 during pregnancy and the anxieties related to those concerns were described. Some participants noted that a lack of evidence around the impacts of COVID-19 at the time, created unknowns. Other work has found significant increases in anxiety and stress in pregnancy and the postpartum period during COVID-19 highlighting the mental health burden among this group [8,11]. Participants in our study felt SRH was considered non-essential; there were uncertainties around access to SRH care and perceptions of a hierarchy of importance whereby SRH was de-prioritised compared to COVID-19 care. Women's health has consistently been neglected in emergency situations with health issues being of political concern only when they directly threaten or endanger national and global stability, yet SRH concerns that threaten individual self-determination are both politically and economically neglected[29]. However, the need for SRH care remains during COVID-19 and other emergencies, becoming even more important for vulnerable populations [12,30,31]. The actual or perceived de-prioritisation of SRH services sends an ideological message about the lack of importance of managing SRH. Service users absorb messages that their SRH care needs are unimportant, resulting in a self-censure of SRH care needs even when necessary, and when services are available albeit in alternative forms [10].

The findings of this study should be read considering several limitations. To capture data during the time-period a convenience sample of only online users was utilised. There is a lack of participant diversity; most were white, *cis*-gendered and able bodied. There is an absence of younger participants among the sample and those with disabilities. Whilst participants who could get pregnant identified with a range of sexualities and genders, the numbers are too small in each group to allow for decisive conclusions to be drawn, thus more research around different sexualities and genders is required. Additionally, the study sample size is relatively small. Thus, the findings cannot be generalised to the UK population as a whole. Rapid research approaches themselves have several limitations, particularly around concerns with rigour, depth, breadth [25]. However the use of rapid research is justified in emergency contexts where there is a need to 'find out fast' [32]. The transparent reporting in this article should aid others in understanding the strategies we have utilised, the limitations and demonstrate the rigour of the work.

Groups who are at greater risk of adverse SRH outcomes[33,34] (eg members of Black, Asian and minority ethnic communities, and communities reflecting wider gender, sexuality and disability related differences) also belong to the same groups who are more susceptible to COVID-19 inequalities[35–37]; members of these groups are missing from the current study thus there is a need for further work to explore if, and how, COVID-19 may have exacerbated already existing disparities. A larger sample would be beneficial. Additionally, given the dominance of quantitative studies emerging around COVID-19, qualitative research is required to understand service user's experiences of disruption to SRH care. Further work should also compare the scale that SRH services were actually disrupted during COVID-19 with the perception of this disruption among service users. Additionally, further work that explores SRH service delivery planning and response as well as service user perspectives during COVID-19 *and* other emergencies (such as disease outbreaks, climate disasters or the impacts of conflict), in both LMiC and higher income countries, is essential to ensure appropriate evidence is available for planners for future emergencies.

Conclusion

Our results make a novel contribution to understanding SRH concerns during the March 2020 UK lockdown. Using unique data collected during 6 of the first 8 weeks of this period, the results demonstrate that at this time, service users experienced reduced choice and were denied access to SRH care, confused messaging was absorbed resulting in a self-censure of SRH care, and the uncertainty around COVID-19 and pregnancy caused anxiety. Previous evidence predominately from LMiC demonstrates that in emergency contexts, SRH should be classified as an essential service and this paper adds to that nascent body of knowledge by contributing empirical data from the Global North, highlighting the universal importance of access to SRH. The findings in our study point to the need for clear messaging in two areas: 1) To highlight the essential nature of SRH care and to provide clear support for service users to navigate and understand SRH care in a rapidly changing crisis and emergency context. 2) To convey the impacts of COVID-19 on maternal and foetal health to enable informed decisions around conception and pregnancy planning. To conclude, planners must work with service users and other stakeholders to ensure that SRH policy and messaging that recognises the bodily autonomy and rights of those who can get pregnant is central to pandemic planning and responses both in the UK and globally. Protocols should be in place prior to the start of emergency situations and implemented immediately to ensure that during the initial crisis period (and beyond), SRH care continues to be provided as an essential service with service users clear about both their *right* to access such care and *how* to do so.

Patient and public involvement

Due to the speed at which this study was developed and its preliminary nature, there was no involvement of patients or the public.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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