#### Manuscript Draft

Manuscript Number: PUHE-D-19-01597R2

Title: Self-reported access to health care, communicable diseases, violence and perception of legal status among online transgender identifying sex workers in the UK

Article Type: Original Research

Keywords: Sex work, prostitution, health, decriminalisation, law, transgender, queer, LGBTQI+

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Abstract: Abstract

Background: Transgender-identifying sex workers are among the most vulnerable groups but are rarely the focus of health research. Here we evaluated perceived barriers to health care access, risky sexual behaviours and exposure to violence in the UK, based on a survey of all workers on BirchPlace, the main transgender sex commerce website in the UK.

Method: Telephone contacts were harvested from BirchPlace's website (n = 592 unique and active numbers). An opt-in text-message 12-item questionnaire was distributed with Qualtrics software, resulting in 53 responses.

Results: Our survey revealed significant reported barriers to health care access, exposure to risky sexual behaviours and to physical violence. Many transgender sex workers reportedly did not receive a sexual screening, and 28% engaged in condomless penetrative sex within the preceding six months, and 68% engaged in condomless oral sex. 17% responded that they felt unable to access health care they believed medically necessary. Half of the participants suggested their quality of life would be improved by law reform.

Conclusions: Transgender-identifying sex workers report experiencing a high level of risky sexual behaviour, physical violence, and inadequate healthcare access. Despite a National Health System, additional outreach may be needed to ensure access to services by this population.

Research Data Related to this Submission

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There are no linked research data sets for this submission. The following reason is given:

Data will be made available on request

Self-reported access to health care, communicable diseases, violence and perception of legal status among online transgender identifying sex workers in the UK

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Word count: 2626 words

## Ethics approval and consent to participate

Approval was granted by the Institutional Review Board (IRB) at Bocconi University, Milan Italy.

## Availability of data and material

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

### **Competing interests**

There are no competing interests to declare amongst any of the authors.

#### **Funding**

This project was funded by ECDC under contract ECDC 8622 NP/2018/OCS/9918.

DS is funded by Welcome Trust Investigator Award and European Research Council HRES-313590.

## **Authors' contributions**

JS initiated the study. DS, SS and MV collected the data. VT and SS processed and interpreted the data, discussing findings regularly with all members of the team. All authors contributed to the drafting of the article, interpretation and revisions.

## \*Highlights

- While sex workers are well-researched, transgender-identifying sex workers are oft neglected.
- We challenge the assertion working online improves safety and independence for trans sex workers.
- Trans sex workers support law reform, identifying poor accessing of public services and the NHS.
- Law and policy reform proposals should consider and reflect gender-diversity.
- Consultations should consider marginalised sex workers working in digital spaces.

Dear Editors,

Law reform around sex work continues to be proposed in many European countries and beyond. Often, both the health of sex workers and public health are explored within such reform proposals and surrounding discussions. Extensive research on sex work law reform and perceptions of reforms has been undertaken, but often not with marginalised groups. Most research continues to be with sex workers on the streets, and those who are CIS gender.

Gender-diverse sex workers are often forgotten in research. Queer and transgender sex workers are said to be at high risk of communicable diseases and to be marginalised, but it remains that these individuals are often also marginalised in research itself. In part this is pragmatic, with many individuals moving off the street and into the digital realm, where it is often assumed to be safer, but also harder to find a sample to research with. However, little data has been collected to support many assumptions. We undertook a small-scale study with transgender-identifying sex workers working in digital spaces in the UK as a first step.

Our findings were deeply troubling and suggest an immediate need for public health workers to think about transgender sex workers as a group with unique needs, but also experiences of marginality and violence that overlap with many other sex worker communities. Our paper acts as a call to arms for more meaningful LGBTQI+ research in the field of sex work and health beyond men-who-have-sex-with-men, and also to emerge an understanding of how marginalised communities move into, and work within, digital space, producing overlapping, but often different, risks. We identify an immediate need for outreach in the UK and a need for public health workers and those in the health service to build trust with these sex workers. We also identify perceptions of law reform that suggest non-binary and transgender voices should further feed into proposals in the UK and beyond.

We appreciate your consideration of the paper. It has not been published previously and is not under consideration elsewhere.

Kind Regards,

Sarah Steele and colleagues.

Self-reported access to health care, communicable diseases, violence and perception of legal status among online transgender identifying sex workers in the UK

#### **Abstract**

*Background:* Transgender-identifying sex workers are among the most vulnerable groups but are rarely the focus of health research. Here we evaluated perceived barriers to health care access, risky sexual behaviours and exposure to violence in the UK, based on a survey of all workers on BirchPlace, the main transgender sex commerce website in the UK.

Study Design: An opt-in text-message 12-item questionnaire.

*Method:* Telephone contacts were harvested from BirchPlace's website (n = 592 unique and active numbers). The questionnaire was distributed with Qualtrics software, resulting in 53 responses.

*Results:* Our survey revealed significant reported barriers to health care access, exposure to risky sexual behaviours and to physical violence. Many transgender sex workers reportedly did not receive a sexual screening, and 28% engaged in condomless penetrative sex within the preceding six months, and 68% engaged in condomless oral sex. 17% responded that they felt unable to access health care they believed medically necessary. Half of the participants suggested their quality of life would be improved by law reform.

Conclusions: Transgender-identifying sex workers report experiencing a high level of risky sexual behaviour, physical violence, and inadequate healthcare access. Despite a National Health System, additional outreach may be needed to ensure access to services by this population.

## **Keywords**

Sex work, prostitution, health, decriminalisation, law, transgender, queer, LGBTQI+

#### Introduction

In the United Kingdom (UK), sex work is complexly regulated, and while for the most part it is legal in England, Wales and Scotland, (although activities like running a brothel and street crawling remain illegalcriminalised), while in Northern Ireland it is illegal to pay for sex.[1] In recent years, though, with the development of apps for mobile phones and websites, it is widely believed that the market for sex has expanded. Little research, however, is available to ascertain the health and social risks experienced by sex workers i using these digital means, with the vast majority of public health studies of sex workers around the world drawing on samples from street-based sites or convenience samples at NHS—healthcare clinics.[2–4] However, researchers suggest these sampling frames are skewed and likely to overlook the highest risk groups, marginalising some sex workers who do not operate in public spaces, including those working online, from both qualitative and quantitative research.[5] Weitzer notes, for example, that whilst street-based prostitution comprises as little as 20% of the market in the US, but, it comprises 80% of academic research.[6] While emerging research in the UK explores digital sex work, such research has itself also highlighted the general continued focus on female street sex workers.[7]

One especially high-risk group is transgender-identifying<sup>ii</sup> sex workers (TGISW). Although public health research into sexual commerce has recently begun to diversify whom it researches,[8] notably engaging with LGBTQI+ sex workers,[9] transgender and non-binary sex workers continue to receive far less attention.[10–12] Such a limited lens is concerning as research from the Americas suggests that transgender women sex workers have higher rates of HIV than non-transgender sex workers, and the general population.[13] Research suggest that these transgender women engage in sex work in greater numbers because of their experience of social stigma and employment discrimination which limit

income generation options, while the cost of gender confirming surgeries may drive higher risk taking behaviours as clients generally pay more for condom-free sex and drug use. [13–15] This research also surmises that sex work may be taken up not just as a means of survival and surgery access, but also as a way to access social support and acceptance of who they are from other members of the TGISW community.[13] Indeed, the limited available research suggest TGISW face many barriers to good health and wellbeing as a result of discrimination around their gender identity, and that sex work both reflects and magnifies these factors.

What literature exists on TGISW is available, mostly from qualitative studies, has yet to address how the shift to using online spaces might impact on their exposure to risks.[8] Recent recommendations from the *Lancet* series on promoting health in sex workers was to make healthcare available for all,[16] which ostensibly is the case in the UK environment. Yet little is known whether, in fact, TGISW who now operate in online spaces are receiving adequate healthcare access, without risk of stigma and are safe from exposure to violence.

To address these limitations, here we conduct a survey of all TGISW actively operating on BirchPlaceUK, which markets itself as '[t]he original home of transgender and bi-curious, happy people!' and has facilitated online sexual commerce since 1995. BirchPlaceUK was selected not only because of its dominance in the market, but also because of its representational diversity Terms of Use permitting data scraping (which most websites prohibit).

#### **Methods**

Survey Design: We performed a structured SMS survey of TGISW who advertised services on BirchPlaceUK. We employed a closed-question, structured survey method. Albeit

critiques by feminist and queer scholars, who argue quantitative surveys and statistical data processing reflect a masculine, positivist tradition and cannot capture the complexity of social life,[17–19] we contend that this approach does, with appropriate care, offer a means to collect large and diverse data sets able to inform public policy reforms, particularly considering debates in the UK over the legal status of sex work.[20]

*Participants:* We collected respondents' contact details and information from the website using *R* software. Specific tags were used to retrieve information from the advertisements where available, including: sexual orientation; self-reported age; and prices for different sexual services.

A twelve-item questionnaire was then administered using Qualtrics Ltd survey software to all scraped numbers through an SMS link (see Web Appendix 1 for full survey). These messages were only sent to those identifying as transgender. The message contained a link to the online survey, which was mobile optimised and could also be answered on a conventional browser. Participants were provided information on the study and consent processes required to participate before receiving the questions. Following completion of the survey and its closure, all text numbers were deleted from the software to protect participants. Also, the responses remained de-identified from the number contacted.

*Analysis*: All statistical analyses were performed using STATA v.15.1. To describe and cross-tabulate the results of the survey we used simple descriptive statistics. As the population represented the entire universe of BirchPlace online sex workers, there was no adjustment performed for clustering or sampling. Thus, survey means and standard deviations were calculation without weighting.

Ethical review: Ethical approval for the study was obtained from the Institutional Review Board (IRB) at Bocconi University. It precluded direct contact with participants, so limiting potential to enhance sample response rates through offering prizes for participation. [10] It did, however, reduce the chance of fraudulent responses. [20] The survey questions related to participants' own sexual and recreational health practices, their opinions on sex work (il)legality, as well as their access to and experiences of health care providers. In order to proceed, participants had to actively 'click' in agreement to a standardised informed consent form, as approved by the IRB and in line with incoming GDPR requirements. To ensure data confidentiality, no identifying information was retained (including IP address). All researchers were fully blinded.

#### **Results**

Our initial harvesting from BirchPlace identified 1703 advertisements, of which 1241 corresponded to unique telephone contacts. Among those, 592 numbers were active, yielding a final sample of 592 phone numbers corresponding to unique TGISW listings.

In a successive wave of three SMS contacts, starting in June 2018, we received 69 responses to our SMS links, from which 53 participants completed the survey whole or in part. Where a participant failed to answer a question or selected an option that they did not wish to answer, we have included these in the denominator figure, but demarcated them as "declined to answer". Failure to answer a question may have indicated either an inability or unwillingness to respond.

Access to Healthcare

Although healthcare, including sexual healthcare, is free-at-the-point-of-use across the UK from the National Health Services, nine respondents (21%) replied that in the last year they, for any reason, felt at one least once that they were unable to access any kind of health care that they believed to be medically necessary. Thirty-three respondents (62%) identified they feel comfortable contacting general practitioners (doctors) if they needed help or treatment, while six (11%) reported not being comfortable doing so, and fourteen respondents declined to answer the question.

Turning to sexual health screening, thirty-five respondents (66%) reported having been tested for gonorrhoea, thirty-one (59%) for chlamydia, thirty-seven (70%) for HIV/AIDs and thirty-four (64%) for syphilis, within the previous twelve months. For those who had been tested, they were then optionally asked if they had tested positive for any of these sexually transmitted diseases, of which nine reported having been treated in the last year for gonorrhoea, nine for chlamydia, one for HIV/AIDS, and three for syphilis.

## Risky Activities

We asked questions about high-risk activities including intravenous (IV) drug use and sexual activity without a condom. Two respondents (4%) reported that they currently inject IV drugs, while forty-five respondents (85%) stated that they do not, and six participants (11%) declined to answer. The two respondents who reported using IV drugs were then prompted with a further question about whether they use these drugs with clients, to which one responded that they do so "very rarely" while the other responded "at least once a week but not every day".

Among high-risk sexual activities, we asked only about condom use, segregating vaginal/anal sex from oral sex. Fifteen respondents (28%) confirmed that they have engaged

in vaginal or anal sex without a condom with a client in the preceding six months. Of these, ten identified that this was "rarely", while four reported they do this "regularly", and one declined to answer. Thirty-Six respondents (68%) confirmed that they have engaged in oral sex without a condom with clients during the preceding six months. Twenty-seven identified that they do this "regularly", while eight stated they do this "rarely" and one declined to answer.

Intimidation and Accessing Law Enforcement

Twenty-one respondents (40%) reported that they have been threatened by a client while working or felt physically intimidated to do something they did not want to do. Twenty-three (43%) respondents reported that they would hesitate to contact law enforcement if they needed them.

Perceptions of the Law Regarding Sex Work

Respondents were asked about their current understandings of the law, which form of regulating sex work they believe would improve their quality of life, and which legal arrangement would best improve their accessing of healthcare.

First, we asked about knowledge of institutional frameworks governing sex work. Of those reporting operating in England (n = 40; 75%), three believed both the buying and selling of sex are currently illegal, twenty-seven believed both the buying and selling of sex to be legal, six believed that buying of sex is illegal while sale is legal, and six individuals declined to answer. Of those identifying they operate in Wales (n = 4; 7.5%), all believed the buying and selling of sex are legal. Of those reporting operating in Scotland (n = 7; 13%), all

believed that the buying and selling of sex are legal. Of those who reported working elsewhere (n = 5; 9.5%), three reported that, where they work, they believe both the buying and selling of sex to be legal, one that the buying of sex was illegal but the selling of sex legal, and one declined to answer.

We further asked which legal measures they perceived would most improve their quality of life. Twenty-four identified sex work being made entirely legal, while seventeen believed it would be best if it were made legal, but some aspects restricted like owning a brothel. One believed that both the buying and selling should both be illegal, while eleven declined to answer the question.

Finally, we asked the TGISW which legal provisions would be best to increase access to healthcare. Twelve respondents identified sex work being decriminalised, twelve if the law required obligatory health checks for those selling sex, even without their consent, thirteen identified buying and selling being legalised, and two identified making selling sex legal but buying illegal. Fourteen individuals declined to answer the question.

## **Discussion**

Main Findings:

Our study revealed that, despite operating in an environment where health care is free at the point of use, a significant portion of TGISW did not receive sexual health screenings and reported being unable to access medically necessary health care. Furthermore, our study found that many experience high levels of exposure to physical violence and engage in risky sexual activities, including condomless vaginal or anal sex.

What is already known on this topic:

Access to safe and effective sexual healthcare services for TGISW widely recognised as a human right. Globally, TGISW experience a higher prevalence of human immunodeficiency virus (HIV) and sexually transmitted infections than the general population or other sex workers, leading many studies to highlight the unique challenges faced by transgender and non-binary sex workers in accessing appropriate healthcare.[21] The literature presents a complex set of factors including stigma, social disadvantage and exclusion acting to produce and reinforce health disparities.[21] Little research has explored health access for TGISW who use digital technology rather than street-based methods for procurement.[10,11]

# What the study adds:

The study design has several important strengths. It is, to our knowledge, the first time a systematic and comprehensive sampling frame has been defined and tested for online operating TGISW in the UK. This overcomes limitations of convenience samples at clinics, which select into the sample those accessing health care. It also overcomes the street-based selection bias of much of the research on sex workers in the UK. This enables our study to evaluate real and perceived barriers to health care access, which other quantitative analyses have not been able to do thus far in the UK comprehensively. Methodologically, our findings demonstrate the potential for using Internet contact methods to identify and evaluate the experiences of sex workers. TGISW should be identified and considered in their own right in future research and proposed reform projects.

# Study Limitations:

Before turning to the implications of our study for research and policy, we must first acknowledge its many limitations. First, as with all self-reported data, there is potential for misreporting, creating measurement error. Second, much prior public health research has

identified sex workers at health care clinics, creating potential for sampling bias and also yielding low numbers of TGISW. While our sampling frame covers the main population of online TGISW, their risks may not correspond to those who work on street-sites, brothels, or other settings. Nonetheless, it is believed that Internet procurement creates an environment less risky for workers to operate in, as they can negotiate their own terms and sites with clients, as well as screen potential clients for risks. Third, our response rate was relatively low for a traditional SMS survey, although this is not to be unexpected given that we faced a difficult-to-reach population and the IRB did not give approval for response-rate boosting techniques, such as offering prizes or cash for participation. However, by not employing incentive-based methods to increase response rates, it may also have prevented differing biases, such as agencies responded as if they were workers Because the survey method involved an opt-in approach, we do not know what role the inclusion of advertisements managed by an agency, rather than specific individuals, will have had on the denominator, complicating the task of calculating a valid response rate.

### **Conclusions**

Taken together, our results show that despite access to publicly funded healthcare services, which offer free sexual health services and communicable disease treatment to all in the UK irrespective of immigration status, nine respondents reported feeling unable to access needed healthcare in the last year. All but one of these individuals identifies being a British or EU citizen in their nationality, so we can rule out the impact of overseas migrant charging on dissuading access to healthcare.[22,23] However, there are many other reasons why need is not met, including access to facilities where they are needed, and with convenient opening hours.

Only 62% of our respondents identified feeling comfortable accessing a doctor, and therefore it is critical for future qualitative research to explore why TGISW in the UK might feel unable or unwilling to access healthcare. Past studies show apprehension with accessing care amongst the general population is hugely varied, and therefore it is critical to explore TGISW' feelings about access both quantitatively and qualitatively to inform interventions to improve access.[24] We note that access to healthcare is vital, not only because the respondents identified experiencing sexual infections and high-levels of risky behaviour, but also because 40% of respondents reported that they have been threatened by a client while working or felt physically intimidated to do something they did not want to do. These results corroborate a previous study of internet-based sex workers (n=240) which found that about half had experienced crime in their work, including threatening and harassing texts/calls/emails, verbal abuse and removal of condom.[25] 43% of respondents reported that they would hesitate to contact law enforcement if needed.

For policy, our research is consistent with support for decriminalising sex work. Consistent with prior studies, criminalising many aspects of sex work may marginalise and lead sex workers into vulnerable positions.[25][26] Our survey found that vast majority of TGISW strongly favoured decriminalisation. But this is not enough. Additionally, the survey makes clear risk to health arise from exposure to physical violence and crime. TGISW struggle to access police and legal representation when needed to safeguard their health.

### **Notes:**

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<sup>&</sup>lt;sup>1</sup> We note the controversy surrounding language and sexual commerce. Throughout we acknowledge the subjectivity of those engaged in selling sex by referring to them as "sex workers", while we refer to sexual commerce often as "prostitution" to reflect the contention around exploitation and sex work. Herein we seek not to form direct opinions on these linguistic debates and so we use "sexual commerce", "prostitution" and "sex workers" throughout, and in line with an author's own language preference.

ii We use "transgender-identifying" or "trans-identifying" throughout to represent the self-identifying nature of those we scraped data from online. Because some individuals identify as pansexual and/or non-cisgender, but

do not demarcate their gender identity in online advertisements, we may not have identified all participants. We note the diversity of identity terms preferred by individuals.

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#### \*Response to Reviewers

To say "sex work is legal" in the UK is a bald statement and oversimplified what is actually a fairly complex picture. I would strongly recommend an amending of this statement.

The paper seems to be focusing on sex work in the UK and makes statements around NHS sampling frames in relation to a lack of understanding about transgender sex workers but the references cited in support of this statement (2-4) are not UK studies. Two are US and one is Western European rather than being UK. Alternative sources would be needed to support the statement being made here. I agree that little research had been done but these studies do not make the case. It would be more And a similar point in relation to reference 5... the authors are criticising poor sampling to understand a UK problem, bearing in mind the opening sentence about the UK but are citing US research. This feels like citations are being shoehorned in to make a point even though I would suggest that they are not relevant to the argument being made. This introduction could be strengthened by openly outlining these challenges - the limited availability of UK research and the reliance on US though the Reference 12 -14 This debate has progressed since 1983 and 1990. There are more recent analyses of this issue. These references are all feminist - where are the queer critiques mentioned? Also, is this statement being made from an assumption that sexworkers would be identifying as women? Why include whatbappears to be a combative statement if the authors are highlighting that other authors The introduction needs rewriting but the study is interesting. It is unclear the impact of identifying as a transgender sexworker vs identifying as transgender vs identifying as a sex worker created the issues in terms of accessing healthcare. Possibly a comparison with transgender studies and sexworker studies (particularly in the introduction) could make this a more useful paper.

> We think that this is an important point to help contextualise your paper. I.e. how does the experience of being a transgender sexworker defer with other sexworkers. Are you able to at least put in a paragraph of discussion into either the introduction or discussion section to explore this angle?

ALL REFERENCES VERIFIED, HOWEVER.

- Ref 1 verified as existing but I'm not sure it supports the statement being made.
- Ref 4 verified but why use US articles if the authors are criticising UK research techniques?
- Ref 5 verified but I don't think it has any relevance to the point being argued.
- Ref 12 14 verified but more up to date citations should be used as this debate has progressed.