Title: Understanding the abortion and contraception care needs and experiences of transgender and gender expansive (TGE) people

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Short abstract *(150 word limit)*

Preliminary evidence suggests that transgender or gender-expansive individuals (TGE) face significant barriers in accessing family planning services, and that if accessed, the quality of that care is low. However, little is known about the need and desire for family planning services, nor the experiences of TGE people in seeking these services. In this quantitative study, we aim to assess the perception versus risk of unintended pregnancy among TGE populations; their needs, experiences and preferences with contraception and abortion care; and to solicit recommendations for creating higher-quality, gender-affirming reproductive health care for all. We are currently fielding a national quantitative survey among TGE individuals who were assigned female at birth to answer these and other questions. Results will contribute to building an evidence base for these understudied populations to highlight priority areas for improving access to and the quality of contraception and abortion care.

Extended abstract

Introduction

The rationale for this study is based on a conceptual framework that posits that transgender or gender-expansive (TGE) individuals face barriers in accessing abortion and contraception care, just as they face barriers in accessing general health care, due to experiences unique to their gender identities. As a result of these barriers, some individuals may be at increased risk of unwanted pregnancy and of carrying an unwanted pregnancy to term, with all of the attendant adverse physical, emotional, and financial outcomes. Yet the scarcity of research on the experience of TGE individuals in seeking abortion and contraception services leaves many questions unanswered.

Only a handful of studies have reported on abortion or contraceptive use among TGE populations. These studies found that 1) many transgender people were not using a highly effective method of contraception, if they were using any method at all, and 2) that unplanned pregnancy was common. Reasons for low contraceptive use included stigma experienced at family planning clinics, discomfort with taking "female" hormones, misinformation around testosterone's effects on preventing pregnancy, a hesitancy among providers to discuss reproductive intentions with transgender individuals, and perhaps the fact that gynecological exams may be more psychologically and procedurally more difficult than with cisgender women [1-2]. In one study of 26 individuals who identified as male but were assigned female sex at birth, **42**% (n=11) were using contraception, 10 using condoms and one relying on partner vasectomy [3]. In a separate study of 41 transgender men who had been pregnant and delivered, **47**% were using a hormonal or barrier method of contraception, while others used either no method, or abstinence/fertility awareness methods [4]. A 2016 abstract presenting data from a medical-record review of transgender female-to-male individuals with documented experiences of gender dysphoria, found that 79 of 123 (**64**%) patients, ages 11-24 years, were using a hormonal method of contraception [5]. A 2018 paper reported results from a mixed-methods study, in which the authors found that 110 out of 197 (**60**%) TGE participants between the ages of 18-45 years reported using at least one method of birth control, 32 out of 197 reported at least one prior pregnancy in their lifetimes (17%), and 7 of the 60 pregnancies reported by these 32 individuals ended in induced abortion (**12**% of pregnancies) [6]. We are aware of no other published studies that have examined abortion access for this population.

To address this gap in the literature, we conducted an exploratory qualitative study of stakeholders in the TGE health community regarding access to abortion and contraception care in 2017-2018. In 29 interviews with clinicians, advocates, and researchers in transgender health and TGE individuals who have either used contraception or had an abortion, participants described significant areas needing improvement concerning reproductive health care access for TGE individuals. Findings suggest a need for nationwide surveys of TGE-identified individuals to determine the proportion that is at risk of unwanted pregnancy, and to better understand the desires and experiences of those seeking contraception and abortion care. The proposed research will provide just that: national-level data among a larger sample of TGE individuals and sexual minority individuals assigned female sex at birth to better understand what proportion of this population is at risk for unintended pregnancy, their needs and desires and preferred language for abortion and contraception services, as well as enumerating the barriers and facilitators they have experienced in seeking this care. We have three primary hypotheses that we aim to test with this study. First, we hypothesize that (1) transgender

and gender expansive (TGE) individuals who were assigned female at birth may have misconceptions about their capacity for pregnancy, and their risk of unintended pregnancy specifically. These misconceptions may place them at increased risk for unintended pregnancy and its attendant adverse outcomes. Further, we also hypothesize that (2) TGE individuals who were assigned female at birth face additional barriers to accessing abortion and contraception care, beyond those barriers experienced by heterosexual cisgender women. We also hypothesize that (3) TGE individuals who were assigned female at birth have specific ideas and suggestions for how the quality of sexual and reproductive healthcare can be improved, including providing this care in a gender-inclusive, less heteronormative manner. We aim to explore these hypotheses with analyses of these data.

Methods

Study sample. This is a cross-sectional study in which a novel survey will be self-administered electronically by approximately 500 or more TGE individuals who were assigned female at birth, are between the ages of 18 and 45 years of age, speak English, and reside in the United States. We seek to achieve a diverse mix of racial identities, as well as regions of residence, in our sample. We will exclude any individual who reported not being assigned female at birth or who declined to answer questions about sex assigned at birth, because we are interested in measuring experiences related to an individual's personal bodily capacity for pregnancy.

Participants are being recruited through The Population Research in Identity and Disparities for Equality (PRIDE) Study at University of California, San Francisco (UCSF), a national, online, prospective, longitudinal cohort study of sexual and gender minority (SGM) individuals, including members of the lesbian, gay, bisexual, transgender, and queer (LGBTQ) communities. We will invite eligible PRIDE Study members (those who have previously indicated that they were assigned female at birth) to participate. It is our understanding that approximately 27% of the current cohort (3,147) have self-identified as a gender minority (based on a comparison with current gender identity and sex assigned at birth), and over 50% of the entire cohort indicated a female sex assigned at birth (5,895). Due to our desire to achieve racial and geographic diversity in our study sample, we are recruiting survey participants from outside of The PRIDE study as well, via posting of study information on social media sites (Facebook, Twitter, Instagram, Reddit, and others), on the websites of TGE-focused partner community based organizations, on the websites of sexual and reproductive healthcare focused partner organizations, and via targeted recruitment by our Community Advisory Board members among their personal and professional networks. We are promoting a snowball sampling method to allow eligible participants to share study information with other potentially eligible and interested individuals.

Traditionally, we would estimate our sample size for a study of this kind by powering for 'similar' proportions of contraceptive use (for instance) as seen in other studies; however, given the extremely limited data in the literature on TGE populations, the highly selected nature of the samples in which contraception and abortion outcomes were estimated, and the wide range of those estimates (42% to 60% for contraceptive use), formal sample size calculations are so variable as to be uninformative. Reflecting the nascent state of research about reproductive health needs among this population, the primary aim of the proposed quantitative study is thus purely descriptive in a fundamental epidemiologic sense – to describe basic sociodemographic characteristics and family planning care-seeking experiences of TGE individuals across the United States. Given that the largest study of contraception or abortion care among TGE individuals to date is of 239 individuals—and most include fewer than 50 individuals – we have proposed a conservative sample

of 500 individuals for our study. If the response to our study is positive, however, it is possible that we could potentially recruit several times that magnitude. Due to the limitations of the literature outlined above, we do not have information to assess how realistic this target sample size is, nor can we state with any reasonable amount of certainty what power this gives us to detect the true proportion of TGE individuals that have accessed contraception care, because the data are too sparse to know what this target proportion is or should be. Despite a high level of uncertainty with respect to sample size and hypothesized outcomes, a study of this kind follows in a long and celebrated history of descriptive epidemiology conducted among populations for which little epidemiological data exist—studies that aim to improve understanding of the public health needs and potentially useful interventions of populations about which little is known.

Survey instrument and data collection. The survey was developed through a collaborative process with our project-specific community advisory board, and via feedback from pilot testing. The survey includes a series of closed and open-ended questions to capture word preferences for sexual and reproductive anatomy, sociodemographic characteristics, information about experiences with and opinions about gender identity, sexual orientation, unintended pregnancy risk, abortion, and contraception, as well as experiences with the health care system. Individuals recruited both inside and outside of The PRIDE Study will be administered identical surveys with branching logic that selectively presents questions based on each participant's capacity to become pregnant, sexual activity, past/current gender affirming procedures (e.g., hysterectomy), and/or use of exogenous hormones for gender affirmation or hormonal contraception, etc.

The survey is distributed using Qualtrics, a secure online platform. After self-assessing eligibility via a series of screening questions, participants are led through the informed consent process. For those who give consent to participate, participants self-administer the 15-minute survey electronically. Data are logged and stored in an encrypted, password-protected server.

Statistical analysis. Our primary analyses, those designed to test our hypotheses and address our study aims, are described here. Given that the overarching objective of the proposed research is to describe health and health care experiences in a relatively unexplored and largely under-researched population, the proposed analyses are largely descriptive, involving the calculation of means, medians and frequencies, with associated measurements of error, as well as small qualitative analyses of open-ended survey questions. Qualitative analyses will involve reading all open-ended text, and iteratively coding responses, line by line, and then organizing tagged excerpts by theme to best summarize participant responses. For all outcomes of interest, if sample size allows, we will also calculate estimates separately by self-reported gender identity within the TGE umbrella, racial identity, and by sexual orientation.

We acknowledge the possibility that additional secondary analyses may be conducted, beyond what we outline below, pending input from our Community Advisory Board. As a note, for all analyses arising from this study, we will not extrapolate beyond the sample population. As we have not fully enumerated or mapped the population of TGE individuals assigned female at birth in the United States, we will not be able to assess the extent to which our sample is "representative" of this larger population. Thus, all discussion of results will acknowledge that statements pertain to the study sample, and do not necessarily reflect the perspectives, experiences and desires of the larger population of TGE individuals assigned female or intersex at birth nationwide. If and where possible, we will compare our results to other studies of the experiences of these populations.

All quantitative analyses will be conducted in Stata version 15, and all qualitative analyses in Dedoose. This study was reviewed and approved by the University of California, San Francisco Committee on Human Research in September 2018.

Expected Results

Quantitative and qualitative analysis of survey data will allow us to report on a number of specific outcomes relevant to the need and desire for family planning services among TGE communities, and specific recommendations for improving this care. Specifically, we will report on:

(1) the proportion of the sample that is capable of spontaneous pregnancy or pregnancy without the use of Assisted Reproductive Technologies (based on responses to gender affirming therapies/surgeries – *i.e.,* those individuals that retain a vagina/cervix/uterus/fallopian tubes/ and ovaries will be considered "capable of spontaneous pregnancy");
(2) the proportion of the sample that is at risk of *unintended* pregnancy (individuals who are capable of pregnancy, report sexual behaviors that involve exposure to sperm/semen, and report not currently desiring pregnancy); and
(3) how individual perception of unintended pregnancy risk compares to actual unintended pregnancy risk.
(4) the proportion of participants who have ever used contraception,
(5) the proportion that is currently using contraception,
(6) types of contraceptive methods used and preferred,
(7) the proportion of participants who have ever had an unwanted pregnancy
(8) the proportion that has ever wanted and/or sought abortion services,
(9) the proportion that has had an abortion(s) (both within and outside of a formal healthcare setting),
(10) preferred method(s) of abortion,
(11) barriers to contraceptive use and/or abortion care (including distance, cost, lack of trained providers, fear of discrimination, fear of being mis-gendered, gender dysphoria, and others),
(12) facilitators of contraceptive use and/or abortion care (respectful/trained providers, gender-neutral clinics, flexible insurance policies, diversity of contraceptive methods available, low-cost/free contraception, and others), and
(13) participant assessment of the quality of contraception and/or abortion care available for sexual and gender minority individuals assigned female at birth.
(14) The range of preferred words and phrases for sexual and reproductive anatomy among TGE individuals, as well as knowledge/familiarity with clinical terms, and finally,
(15) characteristics of high-quality, gender-affirming and comprehensive sexual orientation inclusive sexual and reproductive health care for sexual and gender minority individuals

Combined, these national results will contribute greatly to the ability of researchers and clinicians to facilitate access to full-spectrum family planning options and bodily autonomy for sexual and gender minority individuals. This is in keeping with the work that reproductive health advocates have been promoting for decades.

References

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