

## REVIEW

# Experiences with Achieving Pregnancy and Giving Birth Among Transgender Men: A Narrative Literature Review

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Despite the burgeoning scholarship on transgender health and health care, the literature on transgender reproduction and reproductive medicine remains limited. In this narrative literature review, we examine recently published studies focused on the pregnancy and birth experiences of transgender men to provide an overview of the literature's major contributions and illuminate the gaps that exist within this research. Our review reveals that transgender men face substantial obstacles to achieving pregnancy and significant challenges during pregnancy and birth, which are informed by institutionalized cisnormativity embedded within medical norms and practices. This article demonstrates the importance of better understanding transgender men's reproductive health care needs in order to improve the quality of pregnancy-related health care delivery to this population. Our findings also provide insight for researchers, health care providers, and educators seeking to create and enhance gender-affirming medical education and training.

## INTRODUCTION

Throughout the socio-medical sciences, research concerning the health and health care experiences of transgender populations has substantially grown in the past two decades. In 2016, the US National Institutes of Health (NIH) officially recognized transgender and gender non-conforming populations as health disparity populations [1]. This formal acknowledgement combined with

decades of advocacy efforts from LGBTQ scientific and non-profit communities has created and funded interventions for social and clinical scientists to pinpoint key barriers and opportunities in transgender health care access and utilization for transgender people. However, there is still a need for gender-affirming care, across sex-and-gender-specific health care systems and settings, especially as more people embrace gender diversity and fluidity in contemporary society.

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Abbreviations: ART, assisted reproductive technology.

Keywords: transgender health, health care delivery, pregnancy, childbirth, reproduction

In the case of reproductive health care, transgender people often experience significant forms of discrimination, stigma, and erasure [2] in medical settings from providers, administrative staff, and organizational infrastructures [3,4]. Researchers have noted how transgender men and trans-masculine people often face substantial obstacles regarding pregnancy and childbirth [5]. Specifically, reproductive experiences like pregnancy and childbirth are perceived to be central to contemporary cultural constructions of womanhood and as a result, motherhood is often treated as an exclusively female experience. Simply put, mainstream assumptions of pregnancy and childbirth are often associated with cisgender (*i.e.* non-transgender) women's experiences.

These cisnormative assumptions about pregnancy status and experiences often exclude trans and non-binary people with masculine gender expressions, especially transgender men [5]. For example, clinicians may treat transgender men who are pregnant differently than cisgender women based on pre-existing gender norms and assumptions about who should be able to experience pregnancy in contemporary society – *i.e.* heterosexual, cisgender women [6]. Moreover, transgender and non-binary assigned female at birth patients are often misdiagnosed or dismissed by their reproductive health care providers when expressing concern for their chronic illness symptoms or pain [7,8]. Despite the growing need for gender diverse and affirming care in reproductive health care settings, the literature on transgender reproduction and reproductive medicine remains very limited in the socio-medical sciences [9].

In this narrative literature review, we examine recently published, peer-reviewed studies focused on the pregnancy and birth experiences of transgender men to provide an overview of the literature's major contributions and illuminate gaps within this research. Specifically, we focus on scholarship across scientific fields pertaining to transgender men's reproductive experiences – before pregnancy, during pregnancy, and during childbirth. Through a meta-synthesis approach, we identified potential gaps in the qualitative studies we reviewed, while identifying key themes in the pregnancy and birth experiences of transgender men. In so doing, we hope to expand these developing areas of reproduction and reproductive medicine scholarship, while emphasizing the importance of including and affirming this portion of the transgender population in conversations and policy decisions surrounding reproductive health care. Further, we hope our work here leads us and others to undertake similar reviews and discussions concerning the reproductive health and experience of transgender women and non-binary people assigned male at birth.

As such, we note that no single review is exhaustive and all-encompassing. Like other reviews, we utilized

specific approaches for finding, sampling, and reviewing existing literature. Specifically, we reviewed works in reproductive medicine, reproduction, transgender studies, feminist studies, sociology, public health, and interdisciplinary health sciences. We first searched in databases including Medline, PubMed, Academic Search Complete, and Google Scholar using the terms “transgender pregnancy” and “transgender reproduction.” We then subsequently searched the same database using more specific search terms areas such as “transgender childbirth,” “TGNC and pregnancy,” “transgender and prenatal care,” and “transgender and fertility preservation.” Lastly, we read through the reference list of each article to find additional articles that did not emerge when searching databases.

After reading the articles, we decided to limit our meta-synthesis to experience-based research that has been collected from transgender men. We decided it was important to center transgender men's firsthand experiences of achieving pregnancy, being pregnant, and childbirth because much of clinical research on transgender pregnancy has been conducted *about* transgender men rather than *with* them. However, we used several clinical articles to inform our analysis of qualitative research on these experiences. The sources we collected, and the methodology of each source are located in Table 1. Below, we turn to an overview of the literature's major contributions and illuminate the gaps within this research. Then, we highlight important considerations for future research and theorizing concerning variation in transgender men's pregnancy and birth experiences.

## THEMES IN STUDIES OF TRANSGENDER MEN'S PREGNANCY AND BIRTHING EXPERIENCES

In the following sections, we outline major themes in the literature concerning transgender men's pregnancy and birthing experiences. Although the existing scholarship is relatively limited, insights from these studies may be useful for future research and clinical interventions. As such, we categorize and outline the literature temporally – before pregnancy, during pregnancy, and during childbirth – and then utilize the case of transgender men's pregnancy and birth experiences to illuminate existing gaps in the literature on transgender reproduction and reproductive medicine. It is important to note that transgender reproductive experiences are diverse and can vary on an individual or regional basis. However, our review reveals how transgender men face substantial obstacles to achieving pregnancy and significant challenges during pregnancy and birth while being pregnant, which are informed by institutionalized cisnormativity<sup>1</sup> embedded within medical norms and procedures.

**Table 1. Sources collected and methodology.**

Author (Year)	Focus	Sampling strategy and size	Methodology
Armuand <i>et al.</i> (2017)	Examine how transgender men experience fertility preservation in cryopreservation of oocytes.	Prospective study of 15 adult transgender men (ages 19-35) referred for fertility preservation. Interviews were conducted between 62 and 111 minutes long.	Thematic content analysis
Chen <i>et al.</i> (2018)	Examine attitudes toward fertility and family formation in TGNC youth.	Online survey of 156 sexual and gender minority adolescents ages 14-17 years	Thematic analysis of qualitative data through open coding
Cipres <i>et al.</i> (2017)	Studying the reproductive health needs of transgender men who may be able to conceive.	Retrospective review of charts of 26 transgender men presenting to a clinic for sex workers	Descriptive statistics
Ellis <i>et al.</i> (2015)	Explore conception, pregnancy, and birth experiences of male-identifies and gender-variant natal females.	60 to 90 minute interviews and a self-administered online demographic survey of 8 male-identified or gender-variant gestational parents	Grounded theory methodology
Hoffkling <i>et al.</i> (2017)	Identifying the needs of transgender men during the family planning process and the peripartum period.	Interviews with 10 transgender men ages 18 or older	Grounded theory approach
James-Abra <i>et al.</i> (2015)	Examining the experiences of trans persons who sought assisted reproduction in Ontario, Canada.	60-90 minute qualitative interviews were conducted with 11 trans-identified people and their partners	Qualitative analysis using descriptive phenomenological approach
Leung <i>et al.</i> (2019)	Investigate ART outcomes in female-to- male transgender cohort matched to a cisgender cohort.	Matched retrospective study comparing 26 female-to-male transgender patients matched to 130 cisgender patients matched by age, body mass index and antimullerian hormone levels	Matched cohort analysis and descriptive statistics
Light <i>et al.</i> (2014)	Exploring the experiences of transgender men regarding fertility, conception, and pregnancy experience and birth outcomes.	Cross-sectional survey of 41 transgender men who had been pregnant.	Mixed-methods analysis
Light <i>et al.</i> (2018)	To understand current contraceptive practices and fertility desires among transgender men during and after transitioning.	197 transgender and transmasculine individuals ages 18-45 completed an anonymous online survey	Mixed-methods analysis
MacDonald <i>et al.</i> (2016)	Establish knowledge about transmasculine individuals and their experiences of lactation and chestfeeding.	Interviews with 22 transgender men who had experienced or were experiencing pregnancy, birth and infant feeding	Interpretive description methodology
Mamo (2013)	Examining how queer people engage with fertility biomedicine.	Ethnographic data	Synthesis of social science, media culture and the author's empirical research
Malmquist <i>et al.</i> (2019)	Explore the thoughts and experiences of pregnancy, childbirth and healthcare in self-identified lesbian, bisexual and transgender people.	Semi-structured 61-180 minute interviews with 17 LBT people, 15 who had expressed fear of childbirth.	Thematic analysis
Wierckx <i>et al.</i> (2012)	Provide information about the reproductive wishes of transsexual men after 'sex reassignment' surgery.	Used a self-constructed questionnaire and surveyed 50 transsexual men in a single-center study	Statistical analysis.
Wingo <i>et al.</i> (2018)	Researching the reproductive health priorities and experiences of LGBTQ identified individuals.	In-depth interviews with 39 female-assigned-at- birth individuals ages 18-44	Deductive and inductive coding of interviews through a framework method

## PREGNANCY INTENTIONS

Much like their cisgender counterparts, many transgender people biologically reproduce and have children and define their pregnancy and birth experiences as very fulfilling [5,10,11]. While transgender identity does not reduce one's desire to reproduce, it may shape perceptions of the options available to achieve parenthood [12,13]. Further, transgender people cite similar reasons as their cisgender counterparts for wanting to have children, including intimacy, family formation, and social recognition [10,14,15]. Wierckx and colleagues (2012) note that while transgender status does not interfere with a desire to reproduce, transgender status may change the way one perceives the meaning of family and parenthood [12]. Being transgender may open alternative paths for having children, but these avenues may be limited depending on available resources and care.

Existing literature on pregnancy intentions among transgender men focuses on biological parenthood and pregnancy as the main pathway for becoming a parent. The decision to undergo pregnancy and childbirth can be challenging due to mainstream associations of pregnancy with cisgender women. Cisnormative beliefs about reproduction can make gender presentation and pregnancy status difficult for transgender men or people with masculine gender expressions throughout pregnancy and birth. Further, mainstream recognition of transgender people's reproductive experiences demonstrates cisnormative assumptions of reproduction and parenthood [5].

Interview-based studies highlight many different interpretations of pregnancy among transgender men. Some transgender men respondents like the idea of giving birth but hate the heightened possibility of being misgendered if they were visibly pregnant [15], while respondents from other studies express how pregnancy and their gender identity are at odds with one another [6,15]. In addition, pregnancy is often seen as a necessary step to starting a family so while the experience of being pregnant may not be desired by respondents, having children is [6]. Cisnormative assumptions about reproduction often complicate the decision-making process of becoming pregnant for transgender men who may fear discrimination, stigma, and other consequences that experiencing pregnancy may have on their bodies, health, and well-being. Much like cisgender people, the decision to become pregnant and have a child is a deeply personal decision for transgender men and such decisions and experiences greatly vary.

## FERTILITY PRESERVATION AND ACHIEVING PREGNANCY

Undergoing medical gender transitioning via gender

affirmation surgeries historically meant that a transgender person lost their ability to have a biological child or to gestate a child that may not be biologically related to them. However, with new advancements in assisted reproductive technology (ART) and fertility preservation, there are pathways available for people to conceive children with or without their own gametes [16]. With this new frontier of possibilities comes different challenges for transgender men as they navigate a highly medicalized route of achieving pregnancy [17].

There are several avenues to becoming pregnant for transgender men, such as penile-vaginal intercourse and *in vitro* fertilization, which involves the creation of an embryo outside a body and then implanted in a uterus of the person who will gestate the fetus [18]. Transgender men may use this technology in order to achieve pregnancy or biologically reproduce. If a transgender man wants to carry the child using their own gamete, they may opt for fertility preservation prior to any type of trans-specific health services, including the use of pubertal suppression or gender affirming hormones and gender affirmation surgeries [18]. Some surgical interventions, including hysterectomy and oophorectomy, remove gestational capacity and therefore fertility preservation must be completed prior to the surgery if a person wishes to gestate the embryo [18]. Because certain types of medical transition may interfere with the ability to reproduce, it is important for providers to discuss fertility options with transgender patients before medical transition [19].

Fertility preservation can take several forms including ovarian tissue cryopreservation, embryo banking, and the most widely used method, oocyte cryopreservation [18]. Each of these interventions comes with their own set of issues and benefits; however, there are also certain aspects universal to all methods of fertility preservation. One of the major issues with fertility preservation has to do with the timing of gender transition. Researchers note that there are benefits to early fertility preservation prior to gender affirming surgeries and hormonal transition [20]. However, for adolescents who decide to utilize trans-specific health services, they often are not yet considering their fertility and must make important decisions about fertility preservation at an early age. One study found that for transgender youth deciding to medically transition, it is their parents who are concerned about fertility preservation rather than themselves [21]. Ethical concerns can also arise about the decision making of minors especially when the fertility decisions of the adolescent do not match that of a parent [22]. To date, if transition is happening when a transgender person is still a minor, their parents or guardians still control their medical decisions. In addition, medical gender transitioning may occur when someone is not partnered or is not financially stable enough to undergo the costly fertility

preservation process [23]. Therefore, the timing of medical gender transitioning can play a role in the utilization of fertility preservation in adolescents and children.

Another major concern transgender men often have regarding fertility preservation involves stopping and starting hormones. Fertility specialists often encourage transgender men to discontinue hormone therapy in order to potentially improve the outcomes of egg extraction. However, some side effects of discontinuing hormone therapy include the restarting of menses, feminizing of the body, loss of muscle mass, and changes in body odor and mood, all of which can trigger gender dysphoria – or significant distress or problems functioning in relation to their gender identity – for transgender individuals [17]. In addition, transgender men often worry about starting “female associated” hormones associated with egg extraction processes because it could undermine their gender identity and expression [24]. These studies highlight why concerns about hormones are dominant in the discussion of the use of fertility preservation for transgender men. Overall, the effect of hormones in relation to fertility status and experiences among transgender populations is limited and requires further research and clinical interventions.

Other concerns that transgender men may have include uncomfortable procedures and interactions with health care providers. For example, Armuand and colleagues (2017) found that exposure of genitals during pelvic examination and undergoing a transvaginal ultrasound can both cause discomfort and dysphoric feelings for transgender men. Further, respondents reported the need to dissociate during these medical procedures in order to cope, while others mentioned using the goal of eventual reproduction to help them through these difficult procedures [17]. Providers may also make transgender patients feel uncomfortable by using gendered terminology – *i.e.* terminology that conforms to a binary sex and gender system – for their anatomical features, which could also trigger existing mental health challenges for transgender patients [17]. Some of these concerns could be alleviated by providers practicing gender-affirming care and using gender-affirming language to reference transgender patients.

Providers should still aim to provide the most transgender competent care during reproductive health care visits. Other issues in health care settings may stem from discrimination and lack of access to gender-affirming care. James-Abra and colleagues (2015) note that one transgender man reported being repeatedly denied care for oocyte preservation and was only given care after concealing their gender identity, while other transgender men reported differential access because of their gender identity. These barriers lead many transgender men to not disclose their gender identities in order to receive better

care from providers [25].

Despite new technologies shaping the landscape of reproduction, these options are not always available. Advanced reproductive technology programs vary in their acceptance of patients and some express discomfort in serving transgender patients [14]. This can create many barriers for transgender men who want to utilize assisted reproductive technology. In addition to lack of access and provider barriers, the procedures included under the umbrella of assisted reproductive technology (ART) can be cost prohibitive. The burden of cost has been cited by many transgender men as a reason for not starting or continuing fertility preservation [26]. Costs are especially a concern for transgender men because retrieving eggs can be more invasive and expensive compared to sperm freezing. The cost of egg freezing, and other ART procedures can be more of a burden on transgender men due to discrimination in employment and lack of insurance that covers trans-specific health services [9]. Despite ART continuing to shape the ways transgender men can reproduce using their own gametes, the cost of the procedures often makes this option difficult or impossible to accomplish.

Existing literature indicates the critical need for providers to discuss fertility needs of transgender patients prior to receiving trans-specific health services. Much about the reproductive effects of hormone therapies and gender affirming surgeries is unknown. For example, the providers of over half of transmasculine participants in Light and colleagues' (2018) study did not ask them about their fertility preferences. Overall, many transgender men express a desire to know about options such as egg freezing prior to medical gender transitioning [27]. But this desire for counseling about reproduction is not universal. Several transgender men expressed concern about providers placing too much emphasis on reproduction and some felt they were seen only as “sources of breeding” [4]. While the options for reproduction should be presented to facilitate informed choices, providers should not place too much emphasis on reproduction when speaking to transgender patients.

## NAVIGATING PREGNANCY AND PRENATAL CARE

After a transgender man achieves pregnancy, several decisions must be made about navigating gender presentation and the medicalized process of pregnancy. Because of cisnormative beliefs about pregnancy, transgender men often carefully navigate disclosing pregnancy status. Another major concern during this time period is how and where they seek prenatal care. Pregnancy care must be negotiated in a way that is gender affirming, but transgender men often deal with discrimination in patient-pro-

vider interactions, which can take a substantial toll on their mental health [28]. Overall, these data capture the experiences of transgender men with gender presentation, prenatal care, and mental health as major pillars of the prenatal experience.

### *Disclosure and Management of Pregnancy Status*

One of the major concerns for transgender men is how to disclose and manage their pregnancy status in relation to their gender identity. Men who are pregnant challenge cultural assumptions about gender and sex congruencies [29]. Because being pregnant can disclose someone's transgender identity and lead to bias, transgender men often have to decide about how they want to present themselves in society [30]. The literature suggests that three major options are available to transgender men: passing as a cisgender woman, hiding the pregnancy, or being out and visibly masculine and pregnant [19]. Each of these methods have their benefits and drawbacks.

The first strategy involves passing as a cisgender woman for the duration of the pregnancy and not disclosing one's transgender identity. This eliminates the issues with the incongruence associated with gender presentation and may limit the discrimination pregnant transgender men experience. However, this approach is often detrimental to a transgender man's social transition [19]. Hoffkling and colleagues (2017) found that some pregnant transgender men hated being in public settings because they knew they would be read as a cisgender woman. In this way, the mainstream assumption that pregnancy is an experience that only cisgender women have socially erases pregnant transgender men's gender identities in public and intimate settings. This erasure can impact others' perception of pregnant transgender men's gender presentation as well as their own perception of their gender identity [30]. This may lead to intensifying gender dysphoria because they would be treated like a cisgender woman despite identifying as a man. While there are social benefits to passing as a cisgender woman in comparison to a transgender person [9], this can also impact social transition and mental health among transgender men.

The second option entails hiding the pregnancy and presenting as a man. This may increase the affirmation of gender identity and deem one socially acceptable. Many transgender men can accomplish this because of the assumption that a pregnant midsection is just a "fat male belly"; however, some men noted that concealing the chest area is more of a concern, which often will swell during pregnancy [31]. Concealment of the chest area is often still possible for transgender men through large clothing or binding of the chest. This strategy may decrease the chance that pregnant transgender men will experience of transphobic discrimination and violence

[2,19]. However, this strategy limits their access to pregnancy-related social support and resources [19]. Similar to the strategy of passing as a cisgender woman, concealment of pregnancy is at odds with one's ability to affirm their gender identity and their pregnancy status, which can ultimately have detrimental effects on mental health.

The last strategy is to present as both pregnant and a man, which may affirm one's gender identity and pregnancy status. One benefit includes the increase of internal affirmation of one's gender identity and expression [19]. Hoffkling and colleagues (2017) found that transgender men can become uncomfortable when trying to normalize themselves by inauthentically trying to pass as a cisgender woman or not pregnant [19]. By outwardly presenting as pregnant and a transgender man, internal happiness may increase but the tradeoff is increased scrutiny from external sources. Being pregnant and a man breaks the idea of "cultural genitals" and can increase instances of discrimination, transphobic violence, and microaggressions [19,29].

The three strategies for presentation all have significant benefits and drawbacks. Overall, these strategies utilized by transgender men depend on the situation and the individual's emphasis on the importance of being recognized as both a man and as a pregnant person, versus other priorities, such as attempting to mitigate exposure to trans-specific discrimination or limiting intrapersonal gender dysphoria.

### *Prenatal Health Care: The Patient-Provider Relationship*

Health care plays an influential role in pregnancy experiences because of medicalization of the pregnancy process. Medicalization is the process by which human conditions become defined and treated as medical problems [32]. The medicalization of pregnancy requires pregnant people to interact frequently with health care providers and systems. Often systemic cissexism and transphobia are exemplified through provider-patient interactions. This can take the form of institutional erasure, administrative violence,<sup>2</sup> and microaggressions [2,19]. Provider-patient interactions can shape the health care experiences of transgender men who are pregnant and can affect their likelihood of continuing to seek health care. As Sumerau and Mathers (2019) argue, it is important to examine the experiences of transgender men with providers in order to improve care for the future [9].

Social isolation and discrimination play out during the gendered, medicalized pregnancy process. One of the major problems documented in the literature is the othering of the transgender experience. This refers to making a person feel that their experience is unique and intrinsically different than those around them, and often implying that this difference makes them inferior [33]. The

othering of transgender men's pregnancy experiences can play out in a variety of ways in the health care setting. For example, obstetric and gynecological spaces cater to cisgender women through their literature, brochures, décor, and restrooms [19]. Most transgender pregnant people need to enter these spaces to receive care and these aspects can make them feel uncomfortable and unwelcome before even meeting a provider. In addition, many of these OB/GYN spaces are called "women's clinics," which can be very ostracizing to a patient that does not identify as a woman [4]. It has also been reported that clinics' intake papers and forms include limited, binary gender categories [34]. These administrative decisions imply that transgender men's pregnancies are abnormal and can make a person feel invisible and isolated. Therefore, obstetric and gynecological settings can other transgender patients through administrative violence, including exclusionary intake forms and language that are structured by cisnormativity.

Interactions with providers may also other transgender men's pregnancy experience [19]. One way this plays out is through provider inexperience or ignorance. Many providers have not had any experience with a transmasculine pregnant person and may choose to disclose this to their patients. As a result, the patient may feel uncomfortable because the disclosure conveys that they are the first person to have this experience, which may make them feel unwelcome and concerned about the quality of care they may receive due to the providers lack of experience [19]. However, one transgender man reported a positive provider experience that resulted from a provider saying, "You are not the first" [19]. This simple statement can help normalize their experience while also reassuring them that they will receive trans-competent care. Overall, othering in a health care setting can be eliminated by establishing gender affirming obstetric settings and inclusive intake papers, and by ensuring that providers normalize patient experiences.

Providers also have considerable influence on transgender men's pregnancy experiences because of the medicalization of transgender people. Regardless of pregnancy status, transgender men face heightened scrutiny in health care systems when accessing any type of trans-specific health services, including gender affirming hormones and surgical interventions. Transgender people are typically required to follow the medical model of transgender identity by first receiving a diagnosis of gender dysphoria prior to accessing other trans-specific health services [35]. In addition, providers play a key role in acting as either a protective or risk factor for transgender men throughout their journey through the medical model.

Providers often lack cultural competency in transgender health and gender affirming health care [9]. As a

result, transgender patients are often subject to providers' microaggressions and uncomfortable conversations. For example, a provider may make assumptions about the gender identity of a given patient and misgender them by using non-preferred pronouns and names. Providers using correct pronouns and names can be the start to providing transgender competent care. In addition, providers may also assume the relationship patients have with their bodies. For example, providers often do not consider the discomfort that some transgender men feel with lower genital examinations [6] and can make a patient uncomfortable and decrease the probability of returning. To alleviate some of these discomforts, providers should talk to a patient during the examination and provide the rationale for each step of the examination. Patients may also feel more comfortable if a provider asks what specific terminology the patient would like to use to describe their body [17]. This can alleviate the discomfort sometimes associated with feminized words such as "vagina" and "ovaries" [17]. In so doing, a provider can do their part to avoid gendered assumptions.

Gendered assumptions can be very damaging to someone who feels their body is incongruent to their gender identity, especially in a medicalized setting. Providers may not be able to completely eradicate certain examinations that are integral to prenatal care; however, by taking steps to provide culturally competent care, providers can alleviate some of the discomfort associated with these examinations. Some providers not only lack cultural competency but exhibit blatant transphobia when treating transgender patients during pregnancy, such as denying care or verbally harassing transgender patients [19]. Other times transphobic interactions are harder to pinpoint in a single interaction. Having transgender competent physicians is imperative in preventing instances of transphobia and the negative impacts this can have on care.

Providers can also negatively impact care experiences through a lack of knowledge and training regarding transgender pregnancy. Some transgender men report that they felt their providers were afraid of getting something wrong and therefore were afraid of helping [19]. Given that transgender health care receives minimal attention in medical education, it is not surprising that some providers have these concerns [36]. Many providers do not feel they have the resources to help a patient; when combined with discomfort, a patient will likely have a negative experience. By contrast, one man reported a positive provider experience because his doctor learned everything she could before their next visit [19]. By committing themselves to learning the unique aspects of transgender pregnancy, this provider showed that the patient is important. While providers may not receive the necessary training during medical school, this should not allow them to deny transgender patients or provide them with a

lower level of care. The medical education system needs to ensure training on transgender health is included, but until these changes are implemented, providers need to educate themselves to improve transgender patients' experiences.

### *Social Isolation, Mental Health, and Pregnancy among Transgender Men*

Pregnancy among transgender men is often stigmatized in contemporary society, which can limit existing support systems and resources. Transgender pregnancy experiences are often influenced by social support systems and their interactions with providers and staff. For example, Hoffkling and colleagues (2017) found that transgender men respondents cited their community as a source of resilience when navigating the challenges of being pregnant [19]. Therefore, social support from friends, family members, and communities can serve as a protective factor against some challenges, such as worsening gender dysphoria and discrimination. It is important to connect transgender people with networks in order to alleviate challenges around pregnancy and birth experiences. Many transgender men seek support groups for pregnancy and parenting in LGBT communities but find that many of these support systems are focused on cisgender gay, lesbian, and bisexual people and are ill-equipped to support transgender individuals [19]. Trans-specific support groups and other mental health resources are needed in order to support pregnant transgender people and their families during pregnancy, birth, and parenthood.

Another common theme in transgender men's pregnancy experiences is social isolation. Cisnormative assumptions about pregnancy can significantly limit access to resources among pregnant transgender men. Additionally, the absence of positive representation of transgender pregnancy experiences can exacerbate feelings of isolation among pregnant transgender men [5]. Seeing positive representations of transgender men choosing pregnancy in media and other institutional contexts may help normalize trans pregnancy experiences and alleviate feelings of social isolation. For example, Hoffkling and colleagues (2017) found many men expressed a desire to know that there are other people going through similar experiences as them [19]. Having pregnant transgender men present and positively portrayed in media can be a protective factor for feelings of social isolation that may occur for transgender pregnant men [5].

In addition to social isolation, there are also concerns about mental health and self-perception during pregnancy among transgender men. Transgender men view their own pregnancy in very different ways, ranging from feeling a strong connection to seeing the fetus as a "parasite" [15]. On the one hand, pregnancy can represent a purpose for the body they have, which can lead someone to feel

more at peace with their body as a result of the pregnancy [15]. On the other hand, perceiving a fetus as an "organism" or "parasite" indicates a disconnection between a transgender person and their pregnancy. This could represent a coping mechanism to deal with the gender dysphoria that pregnancy may invoke. It also reflects a common theme during pregnancy: loss of control [15]. Pregnancy removes some bodily autonomy and a transgender man may feel unable to control the bodily changes that pregnancy brings. This can adversely impact their perception of their gender identity and their pregnancy experience.

## **CHILDBIRTH**

Childbirth experiences among transgender men are largely missing in the literature on reproductive health. Childbirth, like pregnancy, is a highly medicalized process and often requires interaction with health care systems, which can be discriminatory for many individuals [37]. Experiencing transphobia from health care providers and a loss of control over the birthing process can negatively influence one's childbirth experience. In addition, childbirth may increase feelings of gender dysphoria because of how it is framed as a cisgender women-specific process. This also may create fear. Overall, the quality of health care provided by health professionals can shape the childbirth experiences of transgender men, and many steps can be taken to ensure that these experiences are positive.

### *Fear of Childbirth*

Fear is a central aspect of many people's expectations and experiences of childbirth. For transgender men, fear can be greater than for cisgender people; this includes both general and specific fears. General fear centers around the pain of the process and concerns for the health of the person giving birth and the child. Many cisgender women share these general fears of childbirth, which can include fear of blood, injections, and uncontrollable pain [37]. People giving birth also fear the loss of control that is involved in medicalized childbirth and sometimes fear serious complications such as death [37]. Another common fear is that there will be insufficient care provided during the birthing process. One study of lesbian and bisexual cisgender women and transgender men found that these groups fear that delivery wards will lack competence and resources, and that they will not have adequate help with labor [37]. These general fears are also compounded with more specific anxieties related to the stress of being a gender minority and the way in which systemic discrimination play out in health care settings. Overall, the general fears and fear of insufficient care are also applicable for cisgender women, but appear to be heightened among pregnant transgender men.



One specific worry that transgender men have about the birthing process is a fear of transphobic treatment. Patients report experiences in which they were told that they could not really be transgender if they were giving birth [37]. Invalidating a person's gender identity during an interpersonal interaction reinforces structural discrimination. Administrative discrimination can also compound these gender identity invalidations through the use of hospital bands that list one's sex as "female" [38]. Administrative discrimination can also include intake forms that do not have space to accurately note one's gender and name [38]. These administrative examples can compound overt transphobia from providers and other hospital staff to create an overall negative experience during childbirth.

Additionally, the risk of infertility can also reduce transgender people's trust in providers during childbirth for fear that a provider may not provide accurate information about their fertility options and treatments options [39]. In the case of transgender respondents from the Trans Pregnancy Project, for example, many trans men felt misinformed about their fertility preservation and treatment options, even after hormone therapy consultations with their providers and about how taking testosterone does not necessarily cause or maintain infertility [39]. Providers with no specialized knowledge in trans reproductive experiences add a layer of stress to the childbirth experiences of transgender men that is otherwise not there for cisgender women giving birth.

Because of the very real concerns about transphobia and discrimination, many transgender men experience hypervigilance during childbirth [37]. Hypervigilance in the childbirth context can mean an increased attention to the activity of the staff during childbirth and an inability to relax, which is often informed by previous experiences of discriminatory treatment. This can cumulatively cultivate a mistrust of providers and health care systems, which can often play a role in the choice of avoiding a hospital birth. Not only are transgender men hypervigilant about the actions of the medical staff, they also have concerns about other patients on a labor and delivery ward or hospital, such as judgement from other patients [15]. Because transgender childbirth is not normalized, cissexist biases can play into interpersonal microaggressions from other patients that will ultimately impact the childbirth experience for transgender men.

Lastly, fear of childbirth for transgender men is often informed by the vulnerable experience of birth itself [37]. Transgender men often fear that if they are within a discriminatory hospital setting and not receiving appropriate care, they will be trapped until the end of birth because they cannot control the experience [37]. Not only is there a physical vulnerability because of the nature of childbirth, there is also an emotional vulnerability caused by the pain that typically accompanies the birth process.

Childbirth can take control away from a person, making them unable to advocate for themselves during labor [15]. Transgender men in Malmquist and colleagues' (2019) qualitative study reported that feeling vulnerable may give health care providers more opportunity to cause them harm [37]. This demonstrates that pregnant transgender men are concerned that providers will take advantage of them during a particularly vulnerable time, which helps contextualize why they make certain decisions about how and where to give birth.

### *Birthing Preferences*

In response to instances of transphobia and discrimination within hospital settings, many transgender men seek alternate settings for birth such as home births, which may alleviate concerns about a medicalized hospital setting and provide more control over the birthing process [6]. Not only do transgender men often want to avoid hospitals, many also want to avoid physicians and therefore opt for non-physician providers [6]. Light and colleagues (2014) found through a survey of 41 transgender men who gave birth that 44% of participants delivered with non-physician providers that were mainly nurse midwives. This large percentage indicates how fear of discrimination from physicians can lead to choosing a nurse midwife [40]. Pregnant transgender men may choose nurse midwives because the midwifery model is less medicalized and could give transgender men more control over their own birthing experiences. Many men cite that control is one of the most important aspects of childbirth and this often leads them to choosing a midwife or doula that will allow for this control [41]. In addition, many transgender men place emphasis on privacy and limiting the number of cervical checks during the birthing process [41]. These concerns may also lead to choosing a non-physician and a non-hospital setting because physicians may not be as willing to change protocols around cervical checks and it may be more difficult to secure a private room in a hospital. Therefore, cisnormativity within medicalized settings informs transgender men's preferences for non-hospital, non-physician-assisted births.

Another unique aspect of birthing comes from the relationship that many transgender men have with their bodies and how they see the themselves. In addition to fears of pain and cisnormative treatment, many transgender men are wary of internalized transphobia [37], which can be intensified by and during the birthing process. In order to cope with the fears associated with one's body, many men preferred cesarean as a better emotional choice for their delivery [15]. Cesarean section may decrease gender dysphoria because a person would not be acutely aware of the presence of their vagina, which could allow them to dissociate from the actual birthing process.

However, some transgender men reported a preference for vaginal birth and cited that it would be a more meaningful experience [15]. A vaginal birth may give some transgender men a sense that their reproductive organs have a purpose and could connect them more with their newborn. How and where to birth a child are very complex decisions that are deeply personal and include many different factors, such as concerns around discrimination, as well as the different ways that a person may see their body in relation to the birthing process.

## CONCLUSION

This review about transgender men's pregnancy and birth experiences illuminates how transgender men make sense of and navigate pregnancy in contemporary society. First, we synthesized narratives about achieving pregnancy, highlighting existing patterns for transgender men desiring pregnancy in comparison to cisgender women while also noting how pregnancy can create potential negative consequences for transgender men such as gender dysphoria [12]. Most experiences of gender dysphoria stem from internalized cultural assumptions about pregnancy as an inherently femininized process and from bodily changes that accompany pregnancy. Additionally, the existing literature on ART emphasizes fertility preservation and erases transgender men who conceive through penile-vaginal intercourse. The scholarship also focuses on transgender men who are able to afford these expensive procedures, which is not representative of the financial circumstances of most transgender people. Nonetheless, the literature on ART and fertility preservation demonstrates that pregnancy for transgender men is biologically and medically possible despite the many barriers that still exist because of discrimination, cost, and concerns with gender dysphoria.

Prenatal care is a time when transgender men often have to make a decision about how to physically manage their gender presentation vis-à-vis their pregnancy, which often coincides with their experiences of gender dysphoria and discrimination. The different presentation methods, including passing as a cisgender woman, concealing their pregnancy, or being visibly pregnant and masculine, each have their own benefits and drawbacks for affirming both their pregnancy and their gender while navigating cisnormative society. We also found that community support plays a vital role in affirming transgender men's pregnancy experiences. The systematic erasure of transgender men within clinical obstetric and gynecological spaces is exclusionary and have a strong negative impact on transgender people. It is imperative that clinicians provide transgender competent care to reduce instances of microaggressions and transphobia. While pregnancy may contribute to gender dysphoria, both social support and

positive interactions with health care provider and systems can help alleviate it.

While childbirth is already a fear-provoking process, minority status of being transgender can increase anxiety about childbirth among transgender men. Fear of insufficient care may lead to hypervigilance and increased stress during childbirth, which in turn may lead to negative pregnancy and mental health outcomes. Some transgender men sought to mitigate these fears by having non-hospital and non-physician birth. A midwife- or doula-assisted birth can increase the sense of control that a transgender man may feel over their own birth experience. Additionally, we found that transgender men have a range of preferences for either cesarean section or vaginal birth, which largely depends on one's comfort with their body and the birth setting they are in. In sum, childbirth is a uniquely difficult process for transgender men to navigate because of their increased vulnerability, which influences the decision among some to give birth outside of a highly medical setting.

While the existing research illuminates many key factors that inform transgender men's experiences with pregnancy and birth, more work is needed. At present, Dr. Sally Hines and colleagues from the Trans Pregnancy Project are conducting an international research study on the reproductive health care needs and experiences of trans men, transmasculine people, and non-binary individuals. Initial findings indicate that providers often have little knowledge or information on how to provide patient-centered, gender affirming care for trans people undergoing pregnancy and childbirth [39]. Little or limited knowledge at the intersections of trans-specific, sexual, and reproductive health services among providers often results in potentially dangerous situations for trans people who experience pregnancy and childbirth. Such insights can be harnessed to inform trans-competent medical education and post-residency trainings for health care providers.

## Provider Recommendations

Transgender men often undergo medical transition prior to thinking about children or conceiving a child. Because of this timing, it is important that providers discuss reproductive options before transgender men undergo surgical transition that will eliminate the option to biologically reproduce. Transgender men report that providers rarely discuss how to preserve reproductive capacity prior to transitioning. In addition, little is known about how hormonal transition will impact pregnancy in the future. This lack of research should be made apparent to patients to better inform their decisions about transitioning and reproduction. All people should have the option to reproduce so it is imperative that providers have these conversations.

The prenatal period can be very difficult for transgender men because of the increased interactions they must have with providers and in health care settings. Providers can improve these prenatal care experiences for transgender men by practicing gender-affirming care, which includes providing all-gender bathrooms, décor, and intake paperwork. Intake forms should leave open options for transgender patients to describe their identities accurately. Providers can also be transgender competent by using a patient's accurate name and pronouns. In addition, a provider can avoid othering transgender patients by not using phrases that imply they are different or out of the ordinary. Normalizing a patient's pregnancy is important for a positive health care experience. Providers can also take it upon themselves to learn about the unique aspects of transgender pregnancy in order to be more culturally competent and provide the best care that they can. Lastly, medical education about transgender health needs to improve so that every provider has the capacity to meaningfully and ethically care for trans patients.

## FUTURE DIRECTIONS

While some research about transgender pregnancy experiences has been done and other studies are currently underway, there are significant gaps in the literature. The existing research has small sample sizes and utilizes convenience sampling, due to the nature of the population, which make the generalizability limited. Without bigger samples, it is difficult to assess the needs of a community that is not homogenous. In addition to having limited knowledge about the experiences of transgender men, much is unknown about pregnancy outcomes for transgender men and their children. Much information about the medical side of the pregnancy is unknown, which can make it difficult for providers to accurately advise patients about pregnancy. More research could also be conducted about the ways that providers can improve the experiences of pregnancy for transgender men.

Despite the limitations with sample size and limited research, this narrative literature review is important because it brings attention to the gaps in research on reproduction and reproductive medicine by centering the experiences of transgender men. Centering and amplifying transgender men's pregnancy and birth experiences can help inform health policies and practices in ethical and meaningful ways. This review is important because negative experiences during pregnancy can impact birth outcomes. In addition, as the reproductive justice framework emphasizes, all people should have the right to bodily autonomy and be able to decide if and when to have children [42]. All people, regardless of gender identity, should be able to have safe and positive pregnancy and birth experiences. Historically, reproductive justice

focused exclusively on cisgender women and their children but the movement and corresponding research is increasingly incorporating transgender people [42]. Advancing the research on the experiences of transgender men becoming pregnant, being pregnant, and achieving childbirth is integral to realizing the principles of reproductive justice in policy and practice.

### Footnotes:

<sup>1</sup>Sumerau and Mathers (2019) define institutionalized cisnormativity as a system in which cisgender norms built into institutional practices, protocols, and other patterns of action.

<sup>2</sup>Nordmarken and Kelly (2014) define administrative violence as a type of violence created by administrative norms, regulations, and systems that creates or maintains structural inequities and violence for vulnerable populations.

**Acknowledgments:** The authors wish to thank Dr. Carla A. Pfeffer and Dr. J.E. Sumerau for their support.

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