

Transsexual men and pregnancy: an integrative literature review

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Abstract *Promoting sexual and reproductive health in the context of transmasculinity constitutes a new issue for health service organisation. This integrative review sought to understand the current evidence on pregnancy in transsexual men in the context of sexual and reproductive health care. From a search of the BVS, PubMed, Science Direct, Scopus, Capes, SciELO and PEP-SIC databases, from 2010 to 2020, a sample of 11 articles was selected, treated by content analysis and grouped into four analytical categories: health services – positive experiences; cis heteronormative health services; implications of pregnancy for transsexual bodies; and repercussions of gender-affirming therapy and pregnancy. A cis heteronormative logic was found to predominate in health care, leading to negative experiences during antenatal care and childbirth among transsexual men. Their unique health needs during the pregnancy-puerperium cycle should include mental health care. It is suggested that strategies be adopted to build capacity in health professionals with a view to respectful, inclusive perinatal care for this population group, as well as further studies on the subject.*

Key words *Pregnancy, Transsexual men, Transgender persons, Reproductive health, Health services*

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Introduction

Transmasculine pregnancy has gradually been incorporated into the everyday agenda of health care. However, the lack of public policies directed to this population and the insufficiency of scientific evidence make it essential to expand the debate on guaranteeing transsexual men access to health services, from the standpoint of care that is comprehensive, inclusive, plural and fundamental to fulfilling sexual and reproductive rights.

Transsexual men are people who identify as men, although their assigned sex at birth was female, due to the appearance of their genitals^{1,2}.

The identity construction process is unique and comprises a number of possibilities. In that universe, individuals can express themselves through characteristics attributed socially to neutral gender or use the various available gender technologies, which include wearing clothing and accessories that reinforce such characteristics, as well as using drugs and sex reassignment surgeries¹.

Fewer than 10% of transsexual men are estimated to have undergone surgical interventions and retain their reproductive organs. Accordingly, they can experience pregnancy².

Successful gender transition is commonly attributed to harmony between changes in physical and psychological features and well-defined and aligned social expressions of gender. However, this simplified view does not match the realities of these people's experience, because gender identity and identity processes involve a series of complex aspects beyond that definition¹.

The capability and endeavour for biological fatherhood through pregnancy have gained visibility in recent years, if slowly. One historic milestone in evidence of this reproductive option came in 2008, in the United States, when Thomas Beatie gained prominence on social media for being the first legally registered transsexual man to experience a pregnancy. Given the experience of trans pregnancy publicised by Beatie, more and more other trans males recognised and sought pregnancy as a means to parenthood³.

No data on the prevalence of pregnancy in transsexual men in Brazil were found: health information systems are still flawed as regards including users' gender identity, which hinders the production of indicators⁴. However, a mapping of 900 transmasculine individuals, published in 2023 by the Brazilian Institute of Trans-masculinities (*Instituto Brasileiro de Transmasculini-*

dades, IBRAT) found that 811 transsexual men (90.1%) had never been pregnant, 32 (3.6%) had one or more experiences of pregnancy and 57 (6.3%) were unable to answer⁵.

Although perinatal studies still contemplate cisgender women almost exclusively⁶, the IBRAT data indicated a need to plan sexual and reproductive health actions directed to transmasculine people⁵.

Recent evidence indicates that cis heteronormative language predominates in perinatal studies, thus effacing pregnant women of other gender identities. A review of health science databases overall by Rioux et al. (2022)⁶ found that only 1.2% of the 500 articles in a random sample on pregnancy or on samples of pregnant populations used gender-inclusive language, while the remaining 98.8% used cisgendered language centred on cis women.

Public policies introduced in Brazil to promote comprehensive health include the National Policy for Comprehensive Health for Lesbians, Gays, Bisexuals, Transvestites and Transsexuals (LGBT) established by Ministerial Order No. 2.836, of 1 December 2011, which guarantees the sexual and reproductive rights and inclusion of gender identity on forms, medical records and in health information systems⁷.

Recently, another important milestone in the fight for sexual and reproductive rights was the 2021 update to the Declaration of Live Births, where the field "Mother" was updated to "Parturient", thus including transsexual men who give birth⁸. However, difficulties in both health access and health care quality and satisfaction are reported frequently by the transsexual population, especially as regards sexual and reproductive health⁴.

In view of the foregoing, there is an evident need for new studies of the perinatal health of transsexual men. Accordingly, the overall aim of this study was to understand the current evidence on pregnancy in transsexual men in the context of sexual and reproductive health care.

Methods

This study is part of the theoretical framework of ongoing research for the master's thesis "When the father is pregnant – transsexual men's experiences with the cycle of pregnancy and puerperium.

It was decided to conduct an integrative literature review, to guarantee a broad method-

ological approach, including experimental and non-experimental studies, for a complete understanding of the phenomenon⁹.

This integrative review was systematised into six distinct stages: (1) formulation of the guiding question, according to the research problem description – “What is the current evidence on pregnancy in transsexual men in the sexual and reproductive health care context?”; (2) a survey of scientific production in selected databases, by keywords and inclusion and exclusion criteria; (3) data collection from an initial screening of abstracts and titles; (4) critical analysis of included studies for sample selection by reading all articles in full; (5) discussion of results in light of the analytical categories; and (6) definitive presentation of the material forming the body of the study^{9,10}.

The Virtual Health Library (VHL), PubMed, ScienceDirect, Scopus, Capes, SciELO and Electronic Journals in Psychology (PEPISC) scientific databases were searched for evidence between October and December 2022, using the descriptors (“Transgender man”) AND (Pregnancy) (Table 1). These terms were chosen after consulting the PubMed descriptors catalogue (MESH terms) and the VHL Health Sciences Descriptors (DeCS).

The inclusion criteria were electronic publication in full and indexed in the selected databases, from 2010 to 2020, in Portuguese, English or Spanish, with full-text access free of charge.

The database selection process identified 274 studies, which were exported to Intelligent Systematic Review (RAYYAN)¹¹, a free online application developed to facilitate initial screening of abstracts and titles¹¹. Note that in this set yielded no results as to non-original studies such as letters to the editor, prefaces, brief communications, corrections/errata, comments, editorials, press or grey literature.

After excluding duplicates (n = 64), it was decided to reject almost 90% (n = 182) of the stud-

ies selected for analysis (n = 210), as they did not address the key theme “pregnancy in transsexual men”. Studies without free full-text access (n = 13) were also excluded. After reading the texts in full (n = 15), one practical guide (n = 1) and summaries of conference proceedings (n = 3) were also excluded, resulting in a final study sample of 11 articles (Figure 1).

The data were organised using the LibreOffice Calc spreadsheet, by the variables: title, year of publication, periodical and study or case objectives, and grouped by study type: case studies, literature reviews and primary studies.

From in-depth exploration of the results using Bardin content analysis¹², four distinct categories of results emerged: cis heteronormative health services; health services – positive experiences; implications of pregnancy in transsexual bodies; and repercussions of gender-affirming therapy and pregnancy. The core meanings extracted from each category supported discussion of the integrative review results.

Results

This integrative review on transmasculine pregnancy from 2010 to 2020 identified a growing number of scientific productions on the topic from 2019 onward: 63.4% of the articles were published between 2019 and 2020, suggesting its importance as a new field of study to be explored.

On the other hand, the results indicate that evidence in the Brazilian context is invisible: the entire sample (n = 11) consisted of international productions, the vast majority published in English (n = 10) and one in Spanish.

Of publications that failed to meet the eligibility criteria (n = 199), the same predominance of international studies was observed: available in English (n = 198) and Spanish (n = 1). No Brazilian article on the subject was rejected.

Table 1. Articles identified, by databases consulted.

Data base	Search strategy	Articles identified
Biblioteca Virtual em Saúde (BVS)	(“Transgender man”) AND	132
PubMed	(Pregnancy)	06
Science Direct	Language Portuguese OR English OR	57
Scopus	Spanish	17
Capes	2010 to 2020	62
Periódicos Eletrônicos em Psicologia (PePSIC)		0
SciELO		0

Source: Authors.

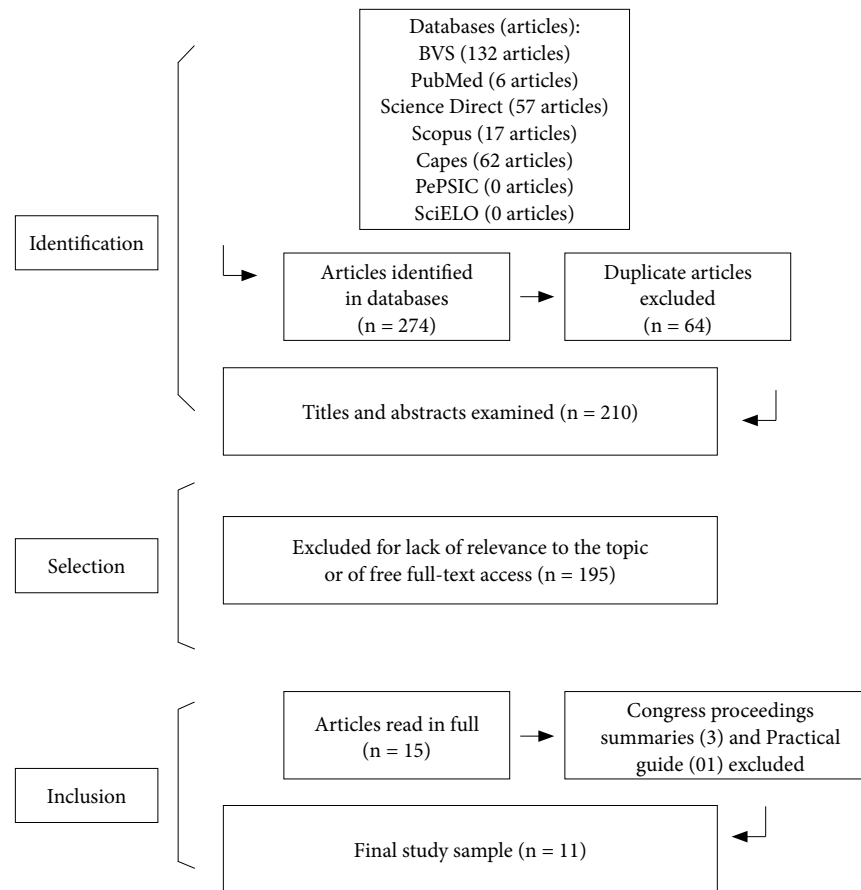


Figure 1. Flowchart of article identification, eligibility and selection.

Source: Authors.

Most of the studies selected for analysis of title, abstract and full text were rejected ($n = 182$) for failing to meet the subject-relevance criterion. In this respect, “contraceptive care”, “sex education”, “fertility preservation and family building”, “barrier to accessing general gynaecology and obstetrics procedures”, and “prevention and treatment of sexually transmitted infections (STIs)” were the main themes addressed by these productions excluded from the study.

By study type, the review sample comprised case studies ($n = 2$), literature review articles ($n = 6$) and primary articles ($n = 3$), as shown in Tables 2 to 4.

The study published in Spanish is a literature review discussing coverage of the pregnancy of Thomas Beatie in the United States. The other scientific productions, both literature reviews and primary articles, focused on transsexual men’s

experiences in health care, their experiences and needs relating to pregnancy, childbirth and the postpartum period, as well as recommendations for inclusive care. No significant divergences were observed between the three different study groups as regards the topics covered.

Discussion

Cis heteronormative health services

In the process of pregnancy, labour and birth, it is common for transsexual men to face numerous obstacles in health care. In this regard, the analytical category “cis heteronormative health services” figures, both implicitly and explicitly, as a central overall focus in the selected collection of articles, as in the core meanings: 1) physical

Table 2. Sample distribution, by case studies.

Case studies			
Title	Year of publication	Periodical	Case
Providing patient-centered perinatal care for transgender men and gender-diverse individuals ¹³	2019	<i>Obstet Gynecol</i>	Report on perinatal care for a 20-year-old transgender man.
The power and limits of classification – a 32-year-old man with abdominal pain ¹⁴	2019	<i>N Engl J Med</i>	Transgender man presenting with severe lower abdominal pain and hypertension is classified as a man who has not taken his blood pressure medications. When examined several hours later, he was found to be pregnant, but no foetal heartbeat could be detected.

Source: Authors.

Tabela 3. Distribuição amostral segundo estudos de revisão.

Review studies			
Title	Year of publication	Periodical	Goals
Transgender men, pregnancy, and the “new” advanced paternal age: a review of the literature ¹⁵	2019	<i>Revista Maturitas</i>	Discuss obstetric care for transsexual men at advanced paternal age.
Transgender men and pregnancy ¹⁶	2016	<i>Obstetric Medicine</i>	Review basic questions to be considered by clinicians who are caring for a transgender man or other gender nonconforming individual whose gender identity is different from the female sex assigned at birth and who are considering, are carrying or have completed, a pregnancy.
Trans* pregnancy and lactation: a literature review from a nursing perspective ¹⁷	2019	<i>Int J Environ Res Public Health</i>	Explore existing scientific literature addressing the processes of lactation and pregnancy in trans individuals and perinatal care recommendations.
Biological, psychological, social, and legal aspects of trans parenthood based on a real case – a literature review ¹⁸	2019	<i>International Journal of Environmental Research and Public Health</i>	Identify relevant studies that describe the relationship between trans people and biological fatherhood.
Experiences with achieving pregnancy and giving birth among transgender men: a narrative literature review ¹⁹	2020	<i>Yale Journal of Biology And Medicine</i>	Evaluate studies on the experience of pregnancy and birth in transgender men to provide an overview of the literature’s key contributions and existing gaps.
Prensa on-line y transexualidad: análisis de la cobertura periodística del caso de Thomas Beatie ²⁰	2010	<i>Estudios sobre el mensaje periodístico</i>	Analyse the journalistic coverage of the pregnancy of Thomas Beatie in the United States.

Source: Authors.

barriers in healthcare spaces; 2) health information systems that limit the LGBTQIAPN+ popu-

lation’s access to gynaecology and obstetrics services; 3) quality of care; and 4) lack of inclusive

Tabela 4. Distribuição amostral segundo estudos primários.

Primary studies			
Title	Year of publication	Periodical	Goals
Men, trans/masculine, and non-binary people's experiences of pregnancy loss: an international qualitative study ²¹	2020	<i>BMC Pregnancy Childbirth</i>	Explore experiences of pregnancy loss among a sample of men, trans/masculine and non-binary people who have been pregnant.
Transmasculine individuals' experiences with lactation, chestfeeding, and gender identity: a qualitative study ²²	2016	<i>BMC Pregnancy Childbirth</i>	1) Describe the experiences of trans masculine individuals with their breasts, lactation and breastfeeding; 2) inform trans masculine individuals wanting to breastfeed their babies; and 3) guide healthcare professionals (e.g., lactation consultants, midwives, nurses, physicians and surgeons) who provide breast and chest care.
From erasure to opportunity: a qualitative study of the experiences of transgender men around pregnancy and recommendations for providers ²³	2017	<i>BMC Pregnancy and Childbirth</i>	Qualitative study to understand the needs of transgender men who have given birth.

Source: Authors.

approaches in interaction with health professionals^{14,18,23-25}.

Traditionally, the environment of sexual and reproductive health services is designed for the needs of cisgender women and, consequently, excludes other publics with different gender identities. It is unsuitable in everything from exclusive toilets for cis women, decoration, through to educational materials^{18,23}. That organisational structure often leaves transsexual individuals feeling excluded or uncomfortable in reproductive health settings²⁴.

In addition to the physical limitations, information systems impose restrictions on procedures socially attributed to "female" users. This poses difficulties in scheduling and billing for obstetrics and gynaecology services, and in using social names or differentiating between them and legal names. There are also disagreements in registering fathers on children's birth certificates. Although some services' admission forms include gender data, this information is neglected by health professionals during appointments²³.

The results showed similar manifestations of this normative pattern of gender exclusion in clinical approaches. Limiting care by binary classification of users into mutually exclusive male and female categories can have significant impli-

cations for health care outcomes. One example of this is the case study presented by Stroumsa et al. (2019)¹⁴, in which a 32-year-old transsexual man seeking emergency care for severe abdominal pain and hypertensive crisis was classified initially as an adult with what was prioritised as a non-urgent hypertensive peak. Only later did laboratory test results identify that he was a pregnant transsexual man in an obstetric emergency¹⁴.

Hoffkling et al. (2017)²³ studied 10 transsexual men from the United States and Western Europe, corroborating the case study above. Participants cited inappropriate medical care, as well as seemingly unnecessary physical, especially pelvic, exams.

In personal and professional relationships, interaction mediated by an inclusive approach is fundamental to providing a positive experience. However, indelicacies are found in interaction with health professionals, such as calling users by their legal name instead of their social name, presuming to know the format of their genitals from their name or face, failing to use admission forms that specify sex and gender, discussing gender identity as if it were sexual orientation and labelling body parts with feminine codes^{23,25}. One United States study found that 50% of trans

users had to teach healthcare professionals about transgender healthcare².

There is a similarly evident lack of information on transsexual people's health, especially reproductive health, issues. Transsexual men describe a lack of information about the short- and long-term effects of testosterone on reproductive organs, ease of conception, pregnancy outcomes, mental health and lactation²³. Most studies do not question people's gender, resulting in an effacement of pregnancies among other gender identities and modalities, as well as inaccurate scientific writing⁶.

The Affirmative and Inclusive Care Project (AICP) sought, by way of a brief intervention, to educate staff of a perinatal nursing service on the United States East Coast to care for transsexual men during pregnancy²⁶. Participants underwent assessment before the AICP intervention and another, two weeks later. At the end of the project, there was a significant increase in the level of knowledge, as well as in the nursing staff's skills and attitudes in providing respectful, gender affirming care for pregnant transsexual men²⁶.

In this regard, with a view to lessening the challenges and overcoming the barriers perceived and reported by transsexual individuals, the World Health Organization (WHO) recommends training health professionals in affirming and inclusive care for this group, in order to guarantee fulfilment of trans people's rights to dignity, privacy, autonomy, physical and psychological integrity and prevention of gender-related violence¹⁷.

Health services – positive experiences

Despite the gaps in the organization of sexual and reproductive health services for transgender men, experiences of welcoming care practices co-exist. Therefore, the category of analysis "health services – positive experiences" seeks to integrate the findings that dialog with the senses and meanings of inclusive/affirmative approaches in relation to gender identity. Positive experiences of transsexual men who have become pregnant are expressed as positive characteristics of clinical interactions, such as respect for privacy, affirmation of gender identity and use of inclusive language. Positive experiences are also characterised by the absence of aversive elements, such as gender errors, invasive questions or eroticisation^{21,23}.

Several studies offer guidelines for fostering inclusive care in health services, with a view to ensuring a positive experience for transsexual

men^{13,16,22,23}. Table 5 shows their authors' main recommendations.

Implications of pregnancy for transsexual bodies

This analytical category comprised studies whose findings, as a core meaning, included effects of pregnancy on transsexual bodies in the light of gender dysphoria and its emotional implications.

It is common, during the gestational process, to observe growth in characteristics attributed socially to the "female" body, such as breasts and hips. These physical changes may be reflected in the experience of gender dysphoria, which is characterised by suffering resulting from the incongruity between sex assigned at birth and gender identity^{2,22,24}. On the other hand, dysphoria does not always relate to the body as such, but how the body is seen by society^{22,27}.

Gender dysphoria was a recurring theme among participants in studies of transsexual men included in this review. Even those who did not report feeling dysphoria in relation to body changes during pregnancy mentioned distress when people confused their gender identity on the basis of the results of the pregnancy or changes in their bodies. Both the changes in their bodies and the way they were treated by society affected them adversely^{22,27}.

The fact that pregnant bodies are still seen in a particularly feminine way, in line with socially constructed gender norms, makes it difficult to affirm gender identity and/or expression during pregnancy and childbirth, which leads to significant levels of stress. Intimate regions tend to be exposed during childbirth and the fear of having body parts seen, examined and labelled can cause extreme discomfort^{18,25}.

Transsexual men's postpartum experiences indicate lactation-related dysphoria for those who choose to chest-feed their children. Those who did not experience dysphoria during lactation, experienced it shortly afterwards. These people did not find it problematic to use breast tissue to feed their children. However, when their breasts stopped being a source of nourishment, others' seeing these individuals as feminine because of their breasts triggered intense social gender dysphoria²².

Despite experiencing dysphoria, however, trans men are able to embrace their reproductive capacity without entering into conflict with their gender identity: they associate the ability to

Table 5. Recommendations for inclusive care in health services.

Environment
<ul style="list-style-type: none"> . Ensure bathrooms are accessible to all genders. . Replace binary pink and blue equipment and décor with other colours.
Communication
<ul style="list-style-type: none"> . Use gender-neutral language for health spaces (“sexual and reproductive health centre” rather than “women’s health centre”). . Use neutral and welcoming language for all people in education, literature and advertising materials. . Replace “It’s a boy/girl” on children’s cards with more inclusive messages (e.g. “Hello, my name is...”).
Continued Professional Development
<ul style="list-style-type: none"> . Ensure that the whole staff is confident in correctly and consistently using social names, when indicated, in healthcare services and records. . Provide training to increase environmental awareness, equity and inclusion of people of all sexes in the whole staff. . Consider how people’s names are used, documented and communicated among care staff members. . How is the phone answered? Staff must be careful not to infer the gender of the person speaking from voice characteristics. . Train sonographers in the use a gender-neutral language during ultrasound examinations for users and fetuses.
Particulars in medical records and appointments
<ul style="list-style-type: none"> . Ask about sexual orientation and gender identity, pronouns and preferences. . Take measures so that scheduling and billing for procedures and appointments do not hinder access for masculine gender people to gynaecology and obstetrics services.
Recommendations for clinical encounters
<ul style="list-style-type: none"> . Be open to your users’ experience and learning when they want to share. . Be knowledgeable and current on the inclusive approach to health. . Ask users and companions their pronouns and use them consistently. . Explain why sensitive questions are relevant. . Be sure that sensitive questions are clinically significant and not motivated by idle curiosity. . Refer to the child with gender-neutral pronouns, unless asked not to. . Refer to the biological father as the “biological father” or “gestational father”. . Refer to the biological father’s partner as “partner”, rather than “father” or “co-mother”. . Ask for the user’s preferred names for body parts (e.g., chest, birth canal, birth opening, frontal orifice, chest feeding etc.). . Use correct pronouns during labour (for example, referring to “father’s heart rate” rather than “mother’s heart rate”). . Provide support for informed feeding of newborns, including options for human breastfeeding and formula feeding. . Discuss contraceptive options using shared decision making. . Discuss the wish to resume hormone therapy, in coordination with the breastfeeding plan. . Do not assume reproductive desires on the basis of sexual orientation, gender identity, gender expression, assigned sex at birth or family formation. . When discussing hormone therapy, consider the effects of medications on fertility and wishes for current and future fertility before starting gender-affirming hormones or puberty-blockers. . Ask about experiences with health services and offer referrals to a multidisciplinary team and/or health care network, if necessary. . Provide information on trans support groups and mental health resources. . Avoid unnecessary and unwanted exposure. . Ensure that only essential staff are present during care. . Limit the number of cervical exams and minimise genital exposure. . Ensure informed consent for any physical examinations.

Source: Authors.

conceive as a gender-neutral human capacity and as something incorporated into the transgender masculine identity²⁷.

It is essential to highlight the emotional implications associated with interrupting testosterone, pregnancy and/or the postpartum period. Related experiences revealed challenging and often unexpected emotional consequences²³. Using testosterone yields improvements in gender dysphoria and quality of life. However, suspending testosterone therapy during pregnancy leads to regression in masculine characteristics, which can significantly affect psychological state¹⁵. It is, therefore, crucial to discuss the psychological impact of discontinuing hormone therapy during pregnancy^{15,18}.

Loneliness and isolation are common feelings among trans men who have experienced pregnancy, as documented in the literature². The scarcity of publicly-recognised pregnant trans men contributes to this population's feeling invisible and these feelings can be amplified as the pregnancy progresses. Also, trans men may experience fear of the foetus's being harmed by stress and gender-affirming hormones, feelings of loss from the changes that occur with pregnancy, discrimination during childbirth, as well as fearing loss of custody of their children or that their children may be discriminated against for having a transgender father².

Depression and suicide rates are higher among transgender individuals than adult averages¹⁶. Although rates of depression can be assumed to be higher among transgender men during pregnancy and postpartum, prevalence and long-term impact are unknown¹⁶. Gedzyk-Nieman et al. (2022)² cited a study in which 35% of participants reported symptoms of postpartum depression, a diagnosis confirmed by a healthcare professional in almost half of these cases. It is thus essential to be aware of the potential risk of postpartum depression in this group of people².

Repercussions of gender-affirming therapy and pregnancy

Being a transsexual man does not appear to have adverse impact on reproductive capacity. Accordingly, analysis of the "repercussions of gender-affirming therapy and pregnancy" explored the core meanings of outcomes of conception and pregnancy among transsexual men after discontinuing testosterone therapy.

Despite uncertainty regarding predictable effects on fertility, trans men have managed to con-

ceive and have successful pregnancies even after testosterone therapy^{16,18}. Although the studies evaluated in this review involved small numbers of participants and were based on self-reported data, with no checking of clinical records, they do suggest that transsexual men had no difficulty becoming pregnant after discontinuing testosterone therapy^{15,16,28,29}.

In the case study by Hassan et al. (2022)²⁸, a 21-year-old trans man managed to become pregnant after interrupting testosterone therapy for two months, although how long the therapy had lasted beforehand was not specified. Conception was achieved by vaginal intercourse with the partner. Similarly, a 20-year-old transsexual man became pregnant through penis-in-vagina intercourse two months after discontinuing testosterone therapy¹³. Gender-affirming testosterone therapy had begun five months before pregnancy. The pregnancy progressed without complications and resulted in spontaneous vaginal labour at 40 weeks' gestation¹³.

Martínez-Varea et al., (2022)²⁹ reported the case of a 35-year-old transsexual man pregnant through artificial insemination after five years using testosterone, which was suspended five months before starting fertility treatment. Dichorionic, diamniotic twin pregnancy progressed without complications until the 29th week of gestation, when selective restriction of foetal growth was identified in the first twin, as well as absent end-diastolic flow of the umbilical artery in both foetuses. However, no association can be inferred between this outcome and a history of prolonged testosterone use, as this would require further clinical investigation^{15,21}.

Obedin-Maliver & Makadon (2016)¹⁶ found that no difficulties in conception were identified among respondents reporting prior testosterone therapy. Of the 41 research participants, 24% experienced an unplanned pregnancy and 72% conceived within six months. Outcomes included some complications: hypertension (12%), premature labour (10%), placental abruption (10%) and anaemia (7%)¹⁶.

For many transsexual men, gender-affirming testosterone therapy does not result in permanent cessation of menstruation¹⁵. In a survey of 41 trans men, 80% resumed menstruation within six months after discontinuing testosterone. However, studies of impacts on long-term fertility are still incipient¹⁵.

In line with the case studies above, recent research suggests that reproductive outcomes among cisgender women are similar to those

among trans/masculine and non-binary people who receive testosterone. Initial concerns about transmasculine individuals' using testosterone were based on early research involving cisgender women, which suggested that high testosterone levels might be associated with increased likelihood of miscarriage. Subsequent studies failed to find that relationship, however²¹. Top of the form

The evidence examined points to the existence of a health care model that takes a cisgender, heteronormative perspective and which, especially as regards sexual and reproductive health services, is not designed to meet the needs of gender-diverse people. That model results in challenging experiences for transsexual people who opt for pregnancy. Also, studies indicate that this population has unique needs in the pregnancy and puerperal cycle, which include the experience of gender dysphoria and related risk of emotional problems.

It is thus crucial that attention be given to the psychological impacts of pregnancy on this group of people and that professional qualification strategies be rethought with a view to improving care by ensuring perinatal care that is respectful and sensitive to the particularities of trans people.

Studies investigating pregnancy in transsexual men are still incipient, which makes it challenging to provide evidence-based care to this group of individuals. Existing studies are limited in several respects, including small numbers of participants and use of self-reported data, with no analysis of information from clinical records. Note also that none of the studies examined in this review included data from Brazilian transsexual men.

Final remarks

In the context of trans-masculinity, pregnancy is a new and challenging field, especially as regards ensuring transsexual men's access to reproductive health services. The lack of Brazilian studies in the selected databases, as well as the absence of any specific public policies, are evidence of this issue's underlines invisibility in the health field in Brazil and of the urgent need for wider discussion of the subject.

This integrative review identified obstacles to be overcome in health systems. It is essential that health information systems specify gender identity and thus offer relevant input to the development of projects, programmes and actions to promote the sexual and reproductive health of transsexual men.

Transmasculine pregnancy was found to challenge established social conventions regarding reproduction and gender identity. Health professionals must, therefore, be encouraged and services organised to provide care for this population: that entails everything from continued professional development towards receptiveness based on ethics, solidarity and a sensitivity to gender diversity, through to promoting a favourable, inclusive environment.

Lastly, further research is recommended to address the singularities of transsexual men during the cycle of pregnancy and puerperium, with a view to filling gaps in knowledge and favouring positive care experiences for this group of people.

It is suggested that future research be grounded in methodologically sound study designs, including sample size and inclusion of individuals from different cultural and social backgrounds. Top of the form

Collaborations

All authors contributed to the study conception and design. GC Silva and MNS Barros collected and analysed the data and wrote the first draft of the manuscript. MIR Puccia performed final review and adaptation of the text. All authors commented on previous versions of the manuscript. All authors read and approved the manuscript. The authors declare no conflicts of interest of a personal, commercial, political, academic or financial nature regarding publication of the study.

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