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### **COMMENTARY**

# LGBTQ+ individuals and pregnancy outcomes: A commentary

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# INTRODUCTION

Lesbian, gay, bisexual, transgender, queer, 'plus' (LGBTQ+) individuals who are pregnant or want to become pregnant face worse pregnancy outcomes than heterosexual patients.<sup>1,2</sup> This is especially relevant because in the USA and elsewhere, sexually diverse and gender-expansive populations have steadily risen, pushing LGBTQ+ pregnancy from niche into the mainstream.<sup>3,4</sup> The American College of Obstetricians and Gynecologists (ACOG) endorses quality care to all people regardless of sexual orientation or gender identity.<sup>5,6</sup> This includes providing gender-affirming care throughout a patient's pregnancy, acknowledging risk factors for LGBTQ+ populations that affect reproductive outcomes, and using appropriate evidence-based clinical recommendations to tailor care.<sup>5,6</sup> Despite these criteria, these patients still encounter many barriers to health care and have limited access to obstetric care and fertility clinics.<sup>5,7</sup> As clinicians and scientists, it is crucial that we continue to promote equitable care to pregnant individuals of any background.

In this piece, LGBTQ+ refers to lesbian, gay, bisexual, transgender and queer individuals, with plus ('+') denoting other sexual orientations and gender identities in nonheterosexual and cis-gendered spheres.<sup>8</sup> Of note, by using the term LGBTQ+, we hope to acknowledge the diversity of intersecting identities in pregnant individuals while simultaneously recognising the paucity of this term as comprehensively describing all sexual identities and gender expressions. The aim of this commentary is to describe pregnancy outcomes of LGBTQ+ individuals, identify research gaps, describe clinical perspectives and propose future directions from a research, clinical care and educational perspective.

# PREGNANCY OUTCOMES FOR LESBIAN AND BISEXUAL GESTATIONAL PARENTS

LGBTQ+ individuals comprise a vast range of sexual orientations and gender identities that contribute to their specific reproductive needs.<sup>9</sup> Worse outcomes have been reported in lesbian and bisexual women in both their ability to achieve a successful pregnancy, and in perinatal outcomes. Pregnancy success rates are overall poorer as compared to heterosexual women. For lesbian and bisexual women, the pregnancy success rate overall is greatly reduced (9-fold lower in lesbian and 2-fold lower in bisexual patients) as compared to heterosexual women, despite parental wishes to become pregnant.<sup>2,10</sup> Additionally, these populations are over 12 times more likely to use fertility treatments, with up to 80% of same-sex couples using anonymous sperm donors.<sup>11</sup> Though there are higher success rates of reproductive assistance in lesbians as compared to heterosexual women, both lesbian and bisexual populations reported increased rates of complications, such as preterm birth (OR 1.84, 95% CI 1.11-3.04).<sup>1</sup> This extends to pregnancy loss, with both miscarriage and stillbirth occurring at significantly higher rates as compared to heterosexual women.<sup>1</sup> Qualitatively, the literature reports an amplified sense of grief after pregnancy loss in lesbian and bisexual couples that is connected to nuanced fertility, legal, and social challenges in a dominantly heterosexual society.<sup>12,13</sup> Pregnant lesbian and bisexual patients exhibit a higher risk for depression (OR 2.85, 95% CI 1.47-5.52) and mental distress with onset in pregnancy (OR 3.13, 95% 1.45-6.75), and are at a higher risk for pre-existing chronic medical conditions (OR 2.09, 95% CI 1.11-3.93) as compared to

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pregnant heterosexual women, after adjusting for sociodemographic factors.<sup>7</sup> Interestingly, both groups have equal to or higher rates of unintended pregnancies as compared to heterosexual women, and significantly higher rates of sexual violence.<sup>2,14,15</sup>

# PREGNANCY OUTCOMES FOR TRANSGENDER, NON-BINARY AND OTHER GENDER-EXPANSIVE GESTATIONAL PARENTS

Much less is known about pregnancy outcomes for transgender and non-binary parents, while other gender identities are left out of the literature entirely.<sup>7</sup> Most of the current literature centres on the barriers that these individuals face, rather than the pregnancy outcomes themselves. These obstacles include disruptions in hormone therapy, fertility preservation, birth trauma and difficulties in receiving postpartum care.<sup>16-18</sup> Additional barriers include underutilisation of contraception, lack of abortion access, abortion attempts without clinical supervision and inadequate care from physicians who are ill-equipped to manage their complex hormonal and psychosocial needs before and after birth.<sup>16,17,19,20</sup> Up to half of all pregnancies in transgender, non-binary and gender-expansive individuals may be unintended, and in those who terminated pregnancy, most had surgical abortions.<sup>21,22</sup> Of note, the ACOG has recently recognised how marginalisation of transgender and gender-expansive communities leads to poor health outcomes, and acknowledged the need to improve training among healthcare providers regarding the specific reproductive needs of these diverse populations in order to reduce the inequities that traditionally limit access to inclusive health care.<sup>6</sup>

# RISK FACTORS FOR POOR OBSTETRIC OUTCOMES AMONG LGBTQ+ GESTATIONAL PARENTS

Risk factors for pregnancy outcomes among LGBTQ+ gestational parents remain poorly understood. It has been hypothesised that these outcomes may be related to disenfranchised status related to sexual orientation, low socio-economic status, limited access to health care or health insurance, and limited healthcare services equipped to treat specific population needs.<sup>5,16,19</sup> Most is known about lesbian and bisexual women, with previous work suggesting that even before conception they may underuse routine health care.<sup>7</sup> This includes use of basic services ranging from screening for sexually transmitted infections to attending influenza vaccination clinics – all of these factors negatively affecting the pregnancy outcomes of lesbian and bisexual women.

For many transgender men and non-binary individuals who are gestational parents, the psychological risks of gender dysphoria, pregnancy itself and potential pregnancy loss may be among the most devastating.<sup>17,19,23</sup> As with lesbian and bisexual women, pregnancy loss in transgender men and non-binary populations may present with both fear and grief; however, a qualitative study by Riggs et al. indicated added themes of misunderstanding from family and friends, and a lack of psychosocial support as major stressors.<sup>12,23</sup> This may exacerbate gender dysphoria for transgender men both during and after the pregnancy, as well as subsequent postpartum depression.<sup>19,24</sup>

# **RESEARCH GAPS**

The current literature presents several limitations on this topic. The terminology used over the past 10 years to define LGBTQ+ individuals has been heterogeneous and inconsistent, which has limited the ability to perform adequate data synthesis to assess the state of the science, to identify gaps, or to suggest adequate clinical recommendations.<sup>6</sup> Indeed, research in this sphere is typically amalgamated because of its status of being outside both heterosexual and cis-gendered norms. Instead of treating specific groups as individual communities, much of the literature - by design or by necessity - groups individuals with different sexual identities and gender expressions together rather than providing a singular patient population.<sup>19</sup> This lack of consistent terminology, plus the heterogeneous grouping of sexual orientation and gender identity, also affects the possibility of performing national population studies for each group. Only in 2020, the US Census Bureau attempted to remedy the lack of data by including responses from the LGBTQ+ communities and persons in same-sex relationships.<sup>25</sup>

Additional limitations are that many previous studies have been damage-centred by focusing more on sexual behaviours and risk of pregnancy rather than on health, access to care, or pregnancy outcomes in these populations.<sup>7,26</sup> Other factors to be considered are the paucity of prospective studies on this research topic, and difficulty in recruiting LGBTQ+ patients because of their limited access to health care and academic centres, as well as the possible stigma that these individuals experience.<sup>6</sup> Although there are a handful of qualitative studies examining the perinatal and postnatal experiences of LGBTQ+ patients, there is not enough focus on the psychological stressors that impact pregnancy outcomes across all groups.<sup>12,23</sup> All of these limitations affect the information and knowledge available to healthcare providers, advocates, policy-makers and researchers. For the healthcare provider, this translates into limited training and based on a survey published in 2018, less than half of board-certified American obstetricians-gynaecologists reported having any training with regards to care for LGBTQ+ patients.<sup>16</sup>

# **CLINICAL PERSPECTIVES**

From a clinical perspective, it is important to emphasise that LGBTQ+ individuals may approach perinatal and

reproductive care with higher levels of anxiety compared with heterosexual women.<sup>27</sup> Both heterosexual and nonheterosexual pregnant patients may experience fear of childbirth, which refers to fear caused by different events, such as becoming pregnant, being pregnant or giving birth.<sup>27</sup> However, LGBTQ+ patients may also experience discrimination and erasure from an experience that is wholly categorised as belonging to heterosexual cis-gendered women, ultimately leading to higher levels of perinatal stress.<sup>27,28</sup> Therefore, prenatal clinics should be more inclusive of the many spaces and identities that queer individuals occupy, as recently advocated by ACOG.<sup>6</sup> This can be obtained by promoting training and education among all medical and non-medical staff, regarding aspects of a prenatal care visit of patients with diverse sexual orientations or gender expressions.

Added to the above stressors are the logistical issues of financing reproductive care, from assisted reproductive technology procedures like in vitro fertilisation to finding healthcare professionals trained in the needs of this population.<sup>1,10</sup> For those pursuing medical or surgical gender-affirming treatment, comprehensive fertility counselling is a clinical necessity.<sup>29</sup> Although the fiscal costs of reproductive care may be high, the psychological costs for transgender men may be higher still. The acts of family planning and assisted reproductive technology procedures themselves may cause further gender dysphoria by, for example, halting testoster-one therapy to pursue cryopreservation of oocytes.<sup>18,29,30</sup>

The creation of multidisciplinary services and collaboration with policy-makers to make prenatal care more affordable is crucial, similar to what has been advocated for transgender and nonbinary paediatric patients.<sup>31</sup> Specialty clinics for high-risk pregnancies are already a common theme in obstetrics, ranging from diabetes care to teenage pregnancy, and should include teams focusing on LGBTQ+ gestational parents. Routine obstetric care followed by periodic consultation with a multidisciplinary LGBTQ+ prenatal clinic would follow the model of other specialty clinics, with the hopes of avoiding minority stress and stigmatisation by providing a point of care through the patient's obstetrician. These clinics would include access, as needed, to midwives, lactation consultants, psychologists, psychiatrists, social workers and medical subspecialists with expertise in pregnant LGBTQ+ individuals in the hopes of facilitating the delivery of much needed physical and mental health services.

# **FUTURE DIRECTIONS**

Based on the described gaps in clinical care, research and education, we propose several key points for future directions in these areas (Box 1). It is essential for researchers to educate themselves on the use of the correct terminology more consistently to curate future knowledge that would be of value to clinicians. Research priorities would include the examination of discrepancies in pregnancy outcomes and associated predictors and risk factors, use

# BOX 1 Key points for future directions in gender inclusive research, care and education in reproductive health of LGBTQ+ individuals

#### 1. Research

- Require justification for exclusion of LGBTQ+ individuals from studies
- Fund studies focused on perinatal care of LGBTQ+ populations
- Support, develop and nurture researchers focused on the study of a variety of sexual identities, with an emphasis on gender-expansive populations
- Ensure diverse representation of researchers, inclusive of LGBTQ+ individuals
- Build and increase participation in national and international LGBTQ+ research networks focusing on pregnancy research
- 2. Clinical care
- Promote outreach from clinical practices to communities and organisations serving LGBTQ+ individuals
- Create universal staff trainings and office guidelines to promote a safe and friendly environment for LGBTQ+ individuals
- Create or participate in a multidisciplinary network with clinicians providing gender-affirming and patient-centric services<sup>6</sup>
- 3. Education
- Add curricula focusing on gender inclusive health care to medical schools and training programmes for all healthcare professionals<sup>33,34</sup>
- Provide for continuing medical education focusing on gender-affirming care and health disparities within pregnant LGBTQ+ populations<sup>34</sup>
- Provide educational and community resources for pregnant patients and families<sup>5</sup>

of quantitative methods to examine prenatal care experiences and identity of barriers to care, and assessment of interventions aimed at improving access to care as well as perinatal and pregnancy success outcomes. Similar to mandates including women and sex as a biological variable in research proposals instituted in the past couple of decades by some government funding bodies, LGBTQ+ individuals should only be excluded for scientific reasons rather than convenience. Legally, barriers to pregnancy and fertility treatments still exist throughout the world, and must be addressed to give LGBTQ+ patients equal rights and access to reproductive care.<sup>32</sup> Regarding clinical care, efforts should be made to create an inclusive environment, with the presence of multidisciplinary clinical teams at least at larger medical centres to provide appropriate patient care before, during and after pregnancy. From an educational point of view, training on LGBTQ+ individuals should be

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incorporated into medical school curricula, into obstetrics and gynaecology graduate medical education, and into subspecialty care at all levels. Finally, from a social standpoint, we must rise above societal stigmas that feed into the disenfranchisement of this population and impact the physical and mental health of LGBTQ+ populations.

# CONCLUDING REMARKS

Equitable prenatal care for LGBTQ+ populations is not a given with regards to the pregnant patient. While physicians are bound to do no harm, disparities in reproductive health care remain prevalent.<sup>1,6,16</sup> LGBTQ+ individuals deserve the same level of reproductive autonomy and healthcare access as is given to heterosexual patients, and we must continue to build the physical, emotional and psychosocial structures necessary to provide comprehensive and quality gender-affirming care.

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#### DATA AVAILABILITY STATEMENT

Not Applicable.

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#### SUPPORTING INFORMATION

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