

Pathways to pregnancy for sexual minority women in same-sex marriages



OBJECTIVE: In August 2018, the American Congress of Obstetricians and Gynecologists reaffirmed its support for marriage equality for all adults and its intent to “understand, recognize, and address the challenges the [lesbian, gay, bisexual, transgender, intersex, queer/questioning, asexual and many other terms (such as nonbinary and pansexual)] and gender nonconforming communities experience in accessing reproductive health care, including family building.”¹

There are more than 280,000 women in same-sex marriages in the United States,² yet little is known about how they build families. Specifically, no research we are aware of has documented the prevalence of fertility treatments and technologies used by this population.

Prior work found sexual minority women have worse pregnancy outcomes compared with heterosexual women.³ While more work is needed to confirm and better understand this finding, it is important to identify and consider how sexual minority women conceive their pregnancies. Our objective was to describe fertility technologies and treatments used by women with live births in same-sex marriages.

STUDY DESIGN: We estimated the prevalence of types of fertility treatments for women in same-sex and different-sex marriages using birth certificate data from Massachusetts

for all live births from 2012 to 2016. Our unit of analysis was pregnancies with live births, which included all births per mother in a given pregnancy ($n = 234,597$ pregnancies). Use of fertility services and technologies was identified from the hospital data and the birth certificate worksheet completed by the parents.

Pregnancies were identified as resulting from 1 or more of the following: any infertility treatment, fertility-enhancing drugs, assisted reproductive technology, intrauterine insemination, intracervical insemination, and anonymous donor sperm. These data could have been underreported or misreported, yet it is unclear whether accuracy of reports differed between pregnancies of same- and different-sex couples.

RESULTS: Compared with pregnancies of women in different-sex couples ($n = 233,158$), the proportion of pregnancies to women in same-sex couples ($n = 1439$) was 12 times higher for use of any type of fertility treatments, 9 times higher for fertility-enhancing drugs and assisted reproductive technology (in vitro fertilization), 33 times higher for intrauterine insemination, and 44 times higher for intracervical insemination (Table). Among all pregnancies using anonymous donor sperm, 4 in 5 were to women in same-sex couples (854 of 1081).

CONCLUSION: These data provide confirmation that married women in same-sex couples use significantly more fertility treatments to achieve pregnancy and document the prevalence of each type. Access to fertility services can be limited, and the treatments may be cost prohibitive, emotionally taxing,⁴ and, for women using in vitro fertilization or fertility medications, increase the risk of multiple births, complications, and preterm delivery.⁵

This research demonstrates the necessity of fertility treatments for women who desire to be a gestational parent and are unwilling to have heterosexual vaginal intercourse outside their relationship or unable to conceive using home intra-vaginal insemination. The higher rates of in vitro fertilization and fertility drugs among women in same-sex couples, while not surprising, might reflect a preference for cost-effective treatments in response to the biological necessity for donor sperm. More research is needed to understand the roles cost and risk perception of fertility treatments play among women in same-sex relationships.

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TABLE

Pregnancies of females in same-sex and different-sex marriages resulting in live births, 2012–2016

| Variables | Same sex % (n) | Different sex % (n) |
|---|-------------------|------------------------|
| Any fertility treatment ^{a,b} | 73.1 (1052) | 5.9 (13,810) |
| Fertility-enhancing drugs ^a | 26.1 (375) | 2.9 (6809) |
| Assisted reproductive technology ^{a,c} | 34.1 (492) | 4.1 (9463) |
| Intrauterine insemination ^d | 9.7 (140) | 0.3 (580) |
| Intracervical insemination ^d | 21.5 (309) | 0.5 (1092) |
| Anonymous sperm donor ^e | 60.4 (869) | 0.1 (206) |
| N ^f | 1439 | 233,158 |

^a Pregnancies were classified by an affirmative on either birth certificate worksheet or hospital worksheet for each; ^b Affirmative to “did you take any fertility drugs or receive any medical procedures from a doctor, nurse, or other health care worker to help you get pregnant with this current pregnancy?” or “did this pregnancy result from an infertility treatment?”; ^c Includes in vitro fertilization, gamete intrafallopian transfer, zygote intrafallopian transfer, intracytoplasmic sperm injection, frozen embryo transfer, or donor embryo transfer; ^d Identified on the hospital worksheet only; ^e Identified on the birth certificate worksheet only; ^f This represents the denominator of all 6 previous rows (ie, pregnancies could report multiple fertility treatments).

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Impact of team training on visit cycle time in ambulatory reproductive health care centers



OBJECTIVE: TeamSTEPPS is an evidence-based teamwork improvement program that teaches communication strategies to promote a culture of safety and commitment to high-quality patient care. The program emphasizes skill building in leadership, communication, situation monitoring, and mutual support to foster high-performing teamwork. As interactions among staff and clinicians in the ambulatory care setting become more effective and efficient, patients may spend less time in the clinic, and medical errors may decrease. We launched a 5-year initiative in 2014 to implement TeamSTEPPS in a large network of ambulatory reproductive health care centers in the United States and evaluated its impact on visit cycle time.

STUDY DESIGN: The implementation of our TeamSTEPPS initiative has been described previously.¹ This analysis describes outcomes of visit cycle time (patient intake

to discharge) among 18 health centers at 2 reproductive health organizations before and after TeamSTEPPS implementation. Participating centers were not involved in any other initiative to improve clinic flow during the study period. Health care centers measure cycle time using an electronic system that staff updates when patients check in for their appointment and check out at the end of the encounter. For each health center, we analyzed cycle time for the 6-month period before TeamSTEPPS implementation and for a 6-month period after a 6-month washout period following implementation. We evaluated cycle times for the most common visit types. To eliminate outliers, we excluded visit times below the fifth percentile and above the 95th percentile for each specific visit type within each health center.

We present data as the mean with standard deviation. We used Student *t* tests to compare visit cycle times before and

TABLE

Mean cycle times of the most common visit types at 18 health centers before and after TeamSTEPPS implementation

| Visit type | Visit duration (min) before TeamSTEPPS | Visit duration (min) after TeamSTEPPS | Decrease (min) per visit ^a | P value | Hours saved |
|----------------------------|--|---------------------------------------|---------------------------------------|---------|-------------|
| All | 85.9 ± 59.8 (n = 31,136) | 81.6 ± 59.7 (n = 34,655) | 4.4 | < .001 | 2515 |
| STI testing | 63.6 ± 34.3 (n = 9183) | 60.4 ± 42.6 (n = 11,174) | 3.3 | .001 | 606 |
| Contraception | 57.4 ± 17.5 (n = 6598) | 56.9 ± 17.3 (n = 5941) | 0.5 | .09 | 52 |
| Surgical abortion | 186.0 ± 56.3 (n = 5616) | 183.0 ± 56.2 (n = 5728) | 3.5 | .005 | 334 |
| Well woman visit | 69.5 ± 20.0 (n = 4098) | 65.2 ± 19.3 (n = 5367) | 4.3 | < .001 | 387 |
| Medical abortion | 107.0 ± 30.2 (n = 2440) | 105.0 ± 26.3 (n = 2769) | 1.9 | .02 | 88 |
| Refill | 25.0 ± 11.4 (n = 1696) | 21.3 ± 9.4 (n = 2035) | 3.8 | < .001 | 127 |
| Medical abortion follow-up | 53.6 ± 17.7 (n = 1525) | 52.1 ± 17.0 (n = 1641) | 1.6 | .01 | 43 |

Data are mean ± SD.

STI, sexually transmitted infection.

^a Any discrepancies with prior columns are due to rounding.

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