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Understanding the Reproductive Experience and Pregnancy Outcomes of Lesbian Women Undergoing Donor Intrauterine Insemination

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Abstract

Purpose: The study purpose was to evaluate the reproductive experience, specifically cycle characteristics and treatment outcomes, of lesbian women. In addition, we aimed to determine whether there are differences in pregnancy outcomes when comparing lesbian women undergoing ovulation induction (OI) versus natural cycles with donor intrauterine insemination (IUI), as well as lesbian and heterosexual women undergoing the same assisted reproductive technology treatment.
Methods: This was a retrospective cohort study including women who underwent an IUI with cryopreserved sperm between 2006 and 2018. The primary outcome of interest was clinical pregnancy (CP) rate.
Results: A total of 216 lesbian women (451 natural cycles and 441 OI cycles) and 584 heterosexual women (1177 natural cycles and 1238 OI cycles) were included in the study. Thirty percent of lesbian women had a hysterosalpingogram as part of their initial workup. Approximately 40% of lesbian women who underwent OI/IUI had previously undergone at least one natural cycle/IUI. There was no significant difference in CP rate when comparing lesbian women and heterosexual women undergoing natural or OI/IUI, or when comparing lesbian women who underwent natural versus OI/IUI cycles. However, there was a significantly higher multiple gestation rate among lesbian women undergoing OI compared with those undergoing natural cycles (11.8% vs. 0%, $p = 0.01$).
Conclusion: This large study showed that while pregnancy outcomes were similar between groups, the multiple gestation rate was higher in lesbian women undergoing OI compared with lesbian women undergoing natural cycles.

Keywords: intrauterine insemination, lesbian, ovulation induction, pregnancy

Introduction

Lesbian women have been building families through biological and nonbiological methods of parenting for years. However, as the field of assisted reproductive technology (ART) has advanced, additional family building options have been developed, which have helped lesbian women overcome the obstacles of reproduction. The reproductive journey for lesbian couples is particularly unique, as lesbian women have many available treatment options, but those seeking treatment do not always have a diagnosis of infertility. However, there are limited data regarding ART treatment outcomes in this presumably fertile population, and how the reproductive experience of lesbian women differs from that of heterosexual couples experiencing infertility.

Lesbian women encounter different reproductive obstacles compared with heterosexual couples experiencing infertility. Given their limited access to sperm or ''absolute'' male factor infertility, lesbian women must go through the process of selecting a sperm donor, either known or anonymous, who is most compatible with their personal, medical, and genetic background. Lesbian and heterosexual patients seeking anonymous sperm donors may find this selection process to be arduous due to the vast number of national sperm donor registries available and the many historical and medical components involved in their decision-making. In addition, these women must manage the cost of shipping, storing, and processing cryopreserved donor sperm samples. Prices can rise substantially for women who undergo multiple treatment cycles or for those who want extended storage

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of multiple samples for future biological siblings for their children.[1]

Even though many lesbian women present for reproductive care without a diagnosis of infertility, they often undergo a similar workup and treatment plan to heterosexual patients with infertility. For example, a hysterosalpingogram (HSG) is often part of this routine screening. And, while lesbian women need access to donor sperm and often undergo an intrauterine insemination (IUI), there are many different methods of cycle preparation. During a natural cycle, patients may monitor ovulation with home detection kits or by an ultrasound to confirm follicular maturity. In oligo-ovulatory patients or hypothalamic patients, oral or injectable medications can be used to induce ovulation. These medications can also be utilized to achieve superovulation for patients with unexplained infertility. A trigger shot with human chorionic gonadotropin (hCG) is often employed to optimally time a donor IUI for all types of cycles. Unlike heterosexual patients, lesbian couples sometimes have the unique opportunity to choose which partner will carry the gestation as in many cases both partners may have the reproductive ability to do so. Some couples opt to undergo co-in vitro fertilization (co-IVF), also commonly referred to as reception of oocytes from partner, in order for both partners to share in the experience of biological parenting.[2]

Choosing the ideal treatment plan that minimizes cost and time and optimizes the likelihood of achieving a healthy baby can be challenging for lesbian patients as data regarding ART outcomes in this population are limited and conflicting. Although some studies have shown no difference in pregnancy rates when comparing lesbian women with heterosexual women undergoing the same treatment with ovulation induction (OI) and IUI,[3–5] others have shown improved pregnancy rates among lesbian women compared with heterosexual women undergoing ART treatment.[6]

This study aimed to characterize the typical reproductive experience, specifically cycle characteristics and treatment outcomes, of lesbian women. The study also sought to determine whether there are differences in pregnancy outcomes when comparing lesbian women undergoing different types of ART treatments as well as lesbian women and heterosexual women undergoing the same type of treatment. The intention of the study was to better define the reproductive experience for lesbian couples seeking care at a fertility practice and determine the ideal mode of treatment for this unique group of women.

Methods

This single-center, retrospective cohort analysis included women 25–44 years of age, who underwent ART treatment at an academic, private fertility practice between 2006 and 2018. Lesbian and heterosexual women who pursued natural cycles or OI with IUI with a cryopreserved sperm source were identified in an electronic medical record database and included in the study. Patients undergoing OI for multiple indications, including anovulatory disorders or polycystic ovary syndrome (PCOS), unexplained infertility, and male factor infertility, were included. PCOS was diagnosed based on Rotterdam criteria.[7] Patients with an endometrial thickness less than 6 mm at the time of IUI were excluded from the analysis. Patients using injectable gonadotropins for OI or with less than 5 million total motile sperm on semen analysis (SA) at the time of IUI were also excluded. During the study time frame, while several ART practices have changed, natural cycle and clomiphene citrate (CC) OI protocols have remained standardized. Letrozole was more consistently used for OI starting in 2012. This study was approved by the Icahn School of Medicine at Mount Sinai Institutional Review Board with a waiver of patient consent.

Patient selection

Lesbian and heterosexual women were included in the study and identified through natural language processing of electronic medical records. Women who self-identified as ''lesbian'' or in a ''same-sex couple'' relationship were included in the ''lesbian women'' group. Women without these identifiers and who had a known male partner in the database were included in the ''heterosexual women'' group. Women who identified as ''single,'' or as a ''single mother by choice,'' or those who indicated a desire for ''single parenting,'' were excluded from the analysis.

Natural cycle

Patients undergoing natural cycle preparation for IUI were monitored for the presence of a dominant follicle. Monitoring was performed by transvaginal ultrasound starting between day 10 and 14, depending on cycle length, until a dominant follicle (≥18 mm) was observed, at which point ovulation was triggered with recombinant hCG (Ovidrel®; EMD Serono, Inc., Rockland, MA). Endometrial thickness was also recorded at this cycle time point. IUI was performed 36 hours after ovulation trigger was administered.

OI with oral medications

OI was performed with CC, a selective estrogen receptor modulator, or letrozole, a third-generation aromatase inhibitor. The choice of controlled ovarian stimulation protocol was determined by the treating physician. Typically, women with unexplained infertility were started on CC and those with PCOS were placed on letrozole; however, variation in medication choice was based on physician discretion. These medications were administered starting on cycle day 3 until cycle day 7. Initial doses of 100 mg of CC and 5 mg of letrozole were used until ovarian response was observed. Monitoring by transvaginal ultrasound was performed starting on cycle day 11 to 12 until a dominant follicle (≥18 mm) was identified. If no response to oral medication was observed, either the cycle was cancelled or additional medication was administered in a stair-step manner, in which a higher dose of the same medication was prescribed in step-wise increments (e.g., CC 100 mg to 150 mg to 200 mg or letrozole 5 mg to 7.5 mg). Ovulation trigger and IUI were performed as described in the natural cycle protocol.

Intrauterine insemination

Previously cryopreserved sperm samples were thawed in a 37-degree incubator for 15 minutes on the morning of the scheduled IUI. Samples were then homogenized thoroughly with a large volume pipette and the volume of the sample and spermatozoa count was recorded. Sperm wash (Irvine

Scientific, Santa Ana, CA) was then added to twice the volume of the sample and the sample was mixed. The sample was then centrifuged at 300 times gravity, approximately 1500 revolutions per minute for 10 minutes. The supernatant was then removed and the pellet was resuspended in 0.3 mL of sperm wash media and mixed.

Outcome measures

Data were collected regarding the patient reproductive journey, including diagnostic procedures and the number and type of cycles each patient underwent. Patient demographics and baseline characteristics that were collected included age, body mass index (BMI), gravidity, parity, and markers of ovarian reserve (anti-Müllerian hormone [AMH] level, day 3 follicle-stimulating hormone [FSH] level, and basal antral follicle count [BAFC]). Several cycle characteristics were also determined, including the number of mature follicles and the endometrial thickness at the time of ovulatory surge and SA parameters, specifically the total motile sperm count (TMSC).

The primary outcome of interest was the clinical pregnancy (CP) rate, which was confirmed by the presence of a gestational sac on transvaginal ultrasound. Secondary outcomes included ongoing pregnancy/live birth (OP/LB) rate, early pregnancy loss (EPL) rate, and clinical pregnancy loss (CPL) rate. An OP was defined as a viable intrauterine gestation at the time of discharge from the practice, which occurred no earlier than 8 weeks of gestation. A LB was considered the delivery of a live born infant after 24 weeks of gestation. EPL was defined as a loss following a positive pregnancy test and before the detection of an intrauterine gestational sac on ultrasound. CPL was defined as a loss following a positive pregnancy test and the detection of an intrauterine gestational sac on ultrasound. Multiple gestations were defined by the presence of more than one gestational sac on transvaginal ultrasound.

Table 1. Lesbian and Heterosexual Women Undergoing Natural Cycles

	Lesbian women (n = 451) Mean ± SD	*Heterosexual women (n = 1177) Mean ± SD*	p
Age (years)	36.1 ± 3.8	39.3 ± 4.7	<0.0001
Body mass index (kg/m^2)	24.6 ± 5.7	25.7 ± 5.2	0.004
Day 3 follicle-stimulating hormone (ng/mL)	8.1 ± 4.8	8.0 ± 4.0	0.79
Anti-Müllerian hormone (ng/dL)	4.0 ± 2.8	2.1 ± 1.7	0.002
Basal antral follicle count	19 ± 3.6	14.6 ± 5.4	0.24
Number of mature follicles at the time of surge	0.96 ± 0.3	0.95 ± 0.4	0.66
Endometrial thickness at the time of surge (mm)	9.1 ± 1.7	8.9 ± 1.7	0.03
Gravidity	0.41 ± 0.8	0.73 ± 1.1	0.0006
Parity	0.11 ± 0.5	0.24 ± 0.5	0.0003
Total motile sperm count (millions of sperm)	46.8 ± 12.2	45.1 ± 14.1	0.02

Statistical analyses

Demographic and cycle characteristics, as well as pregnancy outcomes were compared using a Student's *t*-test, Fisher's exact test, and chi-squared test. A *p*-value of <0.05 was considered significant. To assess differences in clinical outcomes, a multivariate logistic regression was performed for each outcome (CP, OP/LB, EPL, and CPL rate). Models were adjusted for covariates, including age, markers of ovarian reserve, number of mature follicles at the time of surge, parity, and TMSC on SA. Likelihood of clinical outcomes was presented as odds ratios (OR) with 95% confidence intervals (CIs). All analyses were conducted using SAS software (SAS Institute Inc., Cary, NC).

Results

A total of 216 lesbian women underwent 451 natural cycles and 441 OI cycles. A total of 584 heterosexual women underwent 1177 natural cycles and 1238 OI cycles. Of the lesbian patients who underwent IUI cycles, 64 (30%) had an HSG as part of their initial workup. The majority of lesbian women who underwent a diagnostic HSG had a risk factor for tubal disease or had a hydrosalpinx identified on ultrasound. Among heterosexual patients, 64% of patients undergoing natural cycles and 81% of patients undergoing OI cycles had an HSG as part of their diagnostic workup. Of lesbian women who underwent OI, approximately 40%

Table 2. Lesbian and Heterosexual Women Undergoing Ovulation Induction Cycles

	Lesbian women (n = 441) Mean ± SD	*Heterosexual women (n = 1238) Mean ± SD*	p
Age (years)	36.2 ± 4.0	38.4 ± 4.6	<0.0001
Body mass index (kg/m^2)	26.3 ± 5.7	26.1 ± 5.7	0.74
Day 3 follicle-stimulating hormone (ng/mL)	7.31 ± 2.9	8.3 ± 3.8	<0.0001
Anti-Müllerian hormone (ng/dL)	4.1 ± 4.1	2.5 ± 2.8	<0.0001
Basal antral follicle count	15.5 ± 7.3	13.7 ± 7.6	0.42
Number of mature follicles at the time of surge	1.6 ± 0.9	1.7 ± 0.9	0.03
Endometrial thickness at the time of surge (mm)	8.7 ± 1.8	8.4 ± 1.6	0.0003
Gravidity	0.50 ± 0.7	0.75 ± 1.0	0.0001
Parity	0.16 ± 0.6	0.21 ± 0.5	0.30
Total motile sperm count (millions of sperm)	47.3 ± 13.1	48.6 ± 15.2	0.08
Clomid use (%, *n*)	62.6% (276/441)	65.1% (806/1238)	0.34

Table 3. Lesbian Women Undergoing Natural and Ovulation Induction Cycles

	Natural cycles (n=451) Mean±SD	*Ovulation induction cycles (n=441) Mean±SD*	p
Age (years)	36.1±3.8	36.2±4.0	0.79
Body mass index (kg/m^2)	24.6±5.7	26.3±5.7	0.003
Day 3 follicle-stimulating hormone (ng/mL)	8.1±4.8	7.31±2.9	0.04
Anti-Müllerian hormone (ng/dL)	4.0±2.8	4.1±4.1	0.84
Basal antral follicle count	19±3.6	15.5±7.3	0.86
Number of mature follicles at the time of surge	0.96±0.3	1.6±0.9	<0.0001
Endometrial thickness at the time of surge (mm)	9.1±1.7	8.7±1.8	0.01
Gravidity	0.41±0.8	0.50±0.7	0.34
Parity	0.11±0.5	0.16±0.6	0.27
Total motile sperm count (millions of sperm)	46.8±12.2	47.3±13.1	0.54

had undergone at least one prior natural/IUI cycle (range 1–11 cycles).

Demographic and cycle characteristics of patients who underwent natural and OI cycles are listed in Tables 1 and 2, respectively. Lesbian women undergoing natural cycles were younger (36.1±3.8 vs. 39.3±4.7 years, $p<0.0001$) and had a lower BMI (24.6±5.7 vs. 25.7±5.2 kg/m^2, $p=0.004$), higher ovarian reserve (AMH 4.0±2.8 vs. 2.1±1.7, $p=0.002$), and lower gravidity (0.41±0.8 vs. 0.73±1.1, $p=0.0006$) and parity (0.11±0.5 vs. 0.24±0.5, $p=0.0003$) compared with heterosexual women who underwent a natural cycles. Lesbian women also had a thicker endometrial lining at the time of surge (9.1±1.7 vs. 8.9±1.7 mm, $p=0.03$) and a higher TMSC on SA (46.8±12.2 vs. 45.1±14.1, $p=0.02$) compared with heterosexual women. There were no significant differences in day 3 FSH, BAFC, or the number of mature follicles at the time of surge among groups undergoing natural cycles.

Among patients undergoing OI cycles, lesbian women were younger (36.2±4.0 vs. 38.4±4.6 years, $p<0.0001$) and had lower gravidity (0.50±0.7 vs. 0.75±1.0 $p=0.0001$), higher ovarian reserve (AMH 4.1±4.1 vs. 2.5±2.8, $p<0.0001$, lower day 3 FSH 7.31±2.9 vs. 8.3±3.8 ng/mL, $p<0.0001$), fewer mature follicles (1.6±0.9 vs. 1.7±0.9, $p=0.03$), and thicker endometrium at surge (8.7±1.8 vs. 8.4±1.6 mm, $p=0.0003$), compared with heterosexual women. No differences in BMI, BAFC, TMSC on SA, or parity were observed among study cohorts.

A comparison of patient demographics and cycle characteristics among lesbian women undergoing natural and OI cycles is presented in Table 3. Lesbian women undergoing OI cycles had a higher BMI (26.3±5.7 vs. 24.6±5.7 kg/m^2, $p=0.003$), lower day 3 FSH (7.31±2.9 vs. 8.1±4.8, $p=0.04$), more mature follicles at the time of surge (1.6±0.9 vs. 0.96±0.3 follicles, $p<0.0001$), and thinner endometrial linings at the time of surge (8.7±1.8 vs. 9.1±1.7 mm, $p=0.01$) compared with those undergoing natural cycles. Both groups were similar in age, AMH, BAFC, gravidity, and parity and had comparable SA parameters at the time of IUI.

Table 4. Pregnancy Outcomes Among Lesbian and Heterosexual Women Undergoing Natural Cycles

	Lesbian women (n=451) % (n)	*Heterosexual women (n=1177) % (n)*	p
Clinical pregnancy rate	9.5% (43/451)	7.2% (85/1177)	0.12
Ongoing pregnancy/live birth rate	7.3% (33/451)	5.7% (67/1177)	0.22
Early pregnancy loss rate	3.8% (17/451)	2.7% (32/1177)	0.27
Clinical pregnancy loss rate	23.3% (10/43)	21.2% (18/85)	0.79
Multiple gestation rate	0% (0/43)	1.2% (1/85)	0.52

There were no significant differences in CP, OP/LB, EPL, CPL, or multiple gestation rate when comparing lesbian women and heterosexual women undergoing natural (Table 4) and OI cycles (Table 5). After adjusting for all observed confounders, the likelihood of CP (natural cycle: OR 0.4 [95% CI 0.1–2.2], OI cycle: OR 1.4 [95% CI 0.4–4.6]), OP/LB (natural cycle: OR 0.5 [95% CI 0.1–3.6], OI cycle: OR 3.2 [95% CI 0.4–29.1]), EPL (natural cycle: OR 1.7 [95% CI 0.1–31.4], OI cycle: OR 0.7 [95% CI 0.1–8.1]), and CPL (natural cycle: OR 0.1 [95% CI 0.002–4.2], OI cycle: 0.6 [95% CI 0.1–4.1]) were not significantly different between lesbian women and heterosexual women.

When evaluating lesbian women who underwent natural cycle/IUI compared with OI/IUI, no significant differences in CP, OP/LB, EPL, and CPL rates, despite a higher average number of mature follicles at the time of surge in the OI group, were observed. However, for lesbian women, there was a statistically higher multiple gestation rate among those undergoing OI compared with those undergoing natural cycles (11.8% vs. 0%, $p=0.01$) (Table 6). Similarly, heterosexual women undergoing OI compared with those undergoing natural cycles had a higher multiple gestation rate (12.4% vs. 1.2%, $p=0.0003$).

Discussion

Lesbian women present for reproductive care often not for a medical indication, but instead to gain access to reproductive opportunities that are not otherwise available to them. Although lesbian women have access to many treatment options, including the choice of shared motherhood through co-IVF, these treatments come with a high burden of cost and invasiveness that their heterosexual counterparts do not always experience. In addition, several other questions regarding who will carry the gestation, the donor sperm source, and the cost of using an anonymous rather

Table 5. Pregnancy Outcomes Among Lesbian and Heterosexual Women Undergoing Ovulation Induction Cycles

	Lesbian women (n=441) % (n)	*Heterosexual women (n=1238) % (n)*	p
Clinical pregnancy rate	11.6% (51/441)	10.4% (129/1238)	0.51
Ongoing pregnancy/live birth rate	8.4% (37/441)	7.8% (97/1238)	0.71
Early pregnancy loss rate	2.7% (12/441)	3.4% (42/1238)	0.49
Clinical pregnancy loss rate	27.5% (14/51)	24.8% (32/129)	0.69
Multiple gestation rate	11.8% (6/51)	12.4% (16/129)	0.91

Table 6. Pregnancy Outcomes Among Lesbian Women Undergoing Natural and Ovulation Induction Cycles

	Natural cycles (N=451) % (n)	*Ovulation induction cycles (n=441) % (n)*	p
Clinical pregnancy rate	9.5% (43/451)	11.6% (51/441)	0.32
Ongoing pregnancy/live birth rate	7.3% (33/451)	8.4% (37/441)	0.55
Early pregnancy loss rate	3.8% (17/451)	2.7% (12/441)	0.38
Clinical pregnancy loss rate	23.3% (10/43)	27.5% (14/51)	0.38
Multiple gestation rate	0% (0/43)	11.8% (6/51)	0.01

than known sperm donor must be addressed with lesbian women. Thus, the usual treatment paradigms used for a heterosexual couple experiencing infertility may need to be adjusted for lesbian patients.

Even though lesbian women have been using ART for years, there is limited information regarding their experience and likelihood of success with treatments. This lack of data may be a result of incomplete societal and political acceptance of sexual minority individuals; however, with legalization of same-sex marriage by the U.S. Supreme Court in 2015 and support from the American Society for Reproductive Medicine,[8] these barriers are breaking down. In the United States alone, between 6 and 14 million children are being raised by at least one gay or lesbian parent.[8] However, as of 2014, only 60.2% of Society for Assisted Reproductive Technology clinics reported treating lesbian couples.[9,10] As a result, there is a paucity of data regarding utilization trends and the reproductive experience of lesbian women seeking fertility treatment.

In this large study, we found that approximately 30% of lesbian women undergoing care at a reproductive practice underwent an HSG as part of their initial evaluation, which was warranted as most of these women had a risk factor for tubal disease. This rate of HSG testing is lower compared with the heterosexual population with infertility issues undergoing treatment; however, this difference may be due to the fact that lesbian women are presumptively fertile and therefore, many may lack an indication for the test. Still, providers must employ clinical judgment when determining whether a patient is an appropriate candidate for an HSG, especially given that lesbian women tend to have a higher rate of gynecologic problems (i.e. chlamydia and salpingitis) compared with heterosexual women.[3,11]

Although lesbian women may not always have a medical diagnosis of infertility, our findings demonstrate comparable pregnancy rates between lesbian and infertile heterosexual women undergoing both OI with oral medications and natural cycle IUI. This finding is in contrast to prior literature that has suggested an improved pregnancy rate among lesbian women compared with the general population[6,12]; however, those studies have been limited by the inclusion of multiple types of ART treatments and a lack of adjustment for possible confounders in the analysis. Although our findings are consistent with several other studies that identified no significant difference in pregnancy outcomes between lesbian and heterosexual women,[3,4,13] this is the first to evaluate pregnancy rates in women only taking oral OI medications, including both CC and letrozole.

This study is also the first to assess pregnancy outcomes among lesbian women pursuing different types of cycles before IUI. A large proportion of lesbian women in the study began their reproductive journey with a natural/IUI cycle before proceeding to ovarian stimulation with oral medications. Although there was no difference in CP or OP/LB rates among lesbian women who underwent a natural or OI cycle with IUI, a statistically and clinically significantly higher multiple gestation rate was observed among lesbian women who underwent OI compared with those who underwent a natural cycle/IUI (11.8% vs. 0%, $p=0.01$). As singleton deliveries have become a priority in the field of reproductive medicine, particularly following ART treatment, this study suggests that prolonged treatment with natural IUI cycles may be one method to minimize the risk associated with multiple gestations.

Limitations

Some findings in this study warrant further discussion. In particular, the observed CP and OP/LB rates for lesbian women are lower than expected in a fertile population. These findings may be explained by the utilization of cryopreserved sperm compared to fresh sperm, which has been shown to result in lower cycle fecundity rates.[14] In addition, these low success rates may suggest the limitations of ART treatment for both lesbian and heterosexual patients. The study may also be limited by a lack of information about certain diagnoses among lesbian patients, which could predispose them to lower success rates (e.g., endometriosis or PCOS). In fact, some previous literature has suggested a higher prevalence of PCOS among lesbian women compared to heterosexual women,[15] which could explain reproductive outcomes for this sexual minority group. In addition, the retrospective design may introduce selection bias in our

results as patients were not randomized to groups, but rather chosen based on whether they self-identified as lesbian or heterosexual. However, both the univariate and multivariate analyses, which were adjusted for possible confounders, showed consistent findings.

Strengths

Strengths of the study include a large sample size and a comparative analysis of cycle types among different populations. It is also one of the largest studies to characterize utilization trends and ART outcomes in a lesbian population seeking reproductive care. The study was also performed in a single clinic with minimal practice variation and standardized sperm processing.

Summary

As access to care continues to improve, and more lesbian couples engage in their reproductive journey, there will be an increased need to identify methods to maximize treatment success without minimizing the experience of family building. Personalized medicine is important for all patients, but may be particularly necessary in the lesbian community as these women do not always have a medical diagnosis of infertility. Although pregnancy outcomes were similar among lesbian and heterosexual women undergoing OI and IUI with cryopreserved sperm, the study found a higher rate of multiple gestations among lesbian women undergoing OI compared to those undergoing natural cycle IUI with no difference in pregnancy rates between these two groups. Given the prioritization of achieving one healthy pregnancy at a time in the field of reproductive medicine, this study provides new insight regarding the optimal strategy to reach this goal.

Conclusion

The reproductive experience of lesbian women differs from that of heterosexual women with infertility. This large study is the first to evaluate pregnancy outcomes among lesbian and heterosexual women undergoing OI with CC or letrozole and IUI with cryopreserved sperm, as well as among lesbian patients undergoing different IUI cycle types. Although pregnancy outcomes were similar between the groups, the multiple gestation rate was higher in lesbian women undergoing OI compared with lesbian women undergoing natural cycles. Given the importance of singleton deliveries in the field of reproductive medicine, natural cycle IUI may be a safer way for lesbian women to achieve a successful pregnancy.

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Author Disclosure Statement

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