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technologies that include automated analysis and report generation, as our laboratory now utilizes. The most frequent cause of PGT-A error by the IVF laboratory is maternal cell contamination within the provided biopsy specimen.

**IMPACT STATEMENT:** Discrepancies in PGT results can and will occur. A thorough investigation into discrepancies affords opportunities to improve IVF laboratory practices and develop PGT technologies to proactively identify potential sources of error, such as contamination present within biopsy specimens.

### **OORAL ABSTRACT SESSION: PUBLIC HEALTH AND REPRODUCTION**

**O-73 10:45 AM Monday, October 24, 2022**

**IMPACT OF THE COVID-19 PANDEMIC ON SOCIAL OOCYTE CRYOPRESERVATION TRENDS.** Alex Raghunandan, BS,¹ Nina Vyas, MD,² Ashley Aluko,³ Steven D. Spandorfer, MD,⁴ Zev Rosenwaks, M.D.⁴ ¹Monroe Township, NJ; ²Weill Cornell Medicine, New York, NY; ³NewYork-Presbyterian Hospital/Weill Cornell Medical Center, New York, NY; ⁴The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medicine, New York, NY.

**OBJECTIVE:** We aimed (1) to quantify the impact of COVID-19 on the number of oocyte cryopreservation cycles performed, and (2) to characterize the demographics of fertility preservation patients both before and during the pandemic.

**MATERIALS AND METHODS:** We performed a retrospective analysis of patients who underwent social oocyte cryopreservation at a large university-affiliated REI practice. Cycles were divided into two 22-month study periods: pre-pandemic (May 2018–February 2020) and post-pandemic (March 2020–December 2021). Oocyte cryopreservation cycles for medical indications (e.g., cancer diagnosis) were excluded. A Student’s t-test was used to compare parametric variables between the two groups, while a Wilcoxon Rank-Sum was used for non-parametric variables. A Chi-squared test was used to compare parametric variables between the two groups.

**RESULTS:** During the pandemic, there was a decrease in total ovarian stimulation cycles (n=6,343) compared to the pre-pandemic period (n=6,653). In contrast, there was an 18.9% increase in the number of oocyte cryopreservation cycles seen in the post-pandemic group versus the pre-pandemic group (n=1,165 and n=980, respectively). Overall, there was a difference in the proportion of oocyte cryopreservation cycles performed at our institution pre-pandemic and post-pandemic (14.7 vs. 18.3%, p < 0.001). In addition, the age of post-pandemic oocyte cryopreservation patients decreased (36.2 vs. 35.7 yr, p = 0.004). There was no significant difference found in the BMI, AMH, and number of cryopreserved oocytes per cycle between the two patient groups.

**CONCLUSIONS:** Although total ovarian stimulation cases declined following the pandemic, the number of social oocyte cryopreservation cycles increased proportionally. This suggests a shift in patients who present to REI clinics for proactive reproductive planning versus infertility care. More studies are needed to elucidate if this is due to a trend toward delayed childbearing, increase in ART, and/or the pandemic.

**IMPACT STATEMENT:** Following the COVID-19 pandemic, there was a proportional increase in social oocyte cryopreservation cycles.

### **O-74 11:00 AM Monday, October 24, 2022**

**VACCINE AND BOOSTER ACCEPTANCE IN WOMEN CONSIDERING OR UNDERGOING FERTILITY TREATMENTS DURING THEOMICRON SURGE OF THE COVID-19 PANDEMIC.** Luca A. Kassi, MD, Amelia Swanson, PhD, Angela K. Lawson, Ph.D., Shriya Shah, BA, Mary Ellen Pavone, MD Northwestern University, Chicago, IL.

**TITLE:** Vaccine and booster acceptance in women considering or undergoing fertility treatments during the omicron surge of the COVID-19 pandemic.

**OBJECTIVE:** To evaluate perceptions of COVID-19 vaccination and vaccine booster during the omicron surge in women considering or undergoing fertility treatment.

**MATERIALS AND METHODS:** IRB approval was obtained. Cross-sectional anonymous surveys of patients were collected from a single academic fertility center. Participants were randomized 1:1 to receive a one-page graphic of supplemental education, which provided basic facts regarding the association between infertility and COVID-19 vaccination and boosters based on the ASRM COVID-19 taskforce recommendations. Beliefs related to COVID-19 vaccination and boosters were assessed with dichotomous, Likert scale and multiple-choice questions. Assessment of trust in the medical system was conducted via the Medical Mistrust Index (MMI). Descriptive data and chi-square analysis were used to compare the intervention v. no intervention groups.

**RESULTS:** To date, a total of 422/2558 surveys have been received, response rate = 16.5%. The participants were 36.40 years old (SD=4.28), married (89.3%), nulliparous (63.3%), White (82.5%), Asian (5.9%), Hispanic (4.0%), and Black (3.3%) and 47.7% had a history of at least one pregnancy loss. Among the participants who reported their vaccination status (n=408), 96.8% of the study population were fully vaccinated, 86.3% had received their booster dose, 45.5% were fully vaccinated but did not plan on receiving a booster, while only 2.4% did not plan on getting vaccinated. Of those able to be vaccinated during pregnancy, 23.5% were vaccinated during pregnancy. Patients with vaccine hesitancy had higher medical mistrust scores (r= .21, p<.001).

Participants with higher MMI scores had higher PHQ-8 scores (p<.001) and GAD-7 scores (p<.001), were more likely to have a loved one diagnosed with COVID-19 (p=.002), were less likely to have a booster, and underlying medical conditions were more likely (p<.001). The general population (n=422) and intervention group (n=211) were similar in age, race, marital status, education level and insurance status. More than half of the participants (58%) were working as of the survey date, with higher rates among those in the intervention group (n=0.04). A greater proportion of participants in the intervention group were married (92% vs. 83%), current smokers (9% vs. 2%), and working (76% vs. 50%).

**CONCLUSIONS:** This study provides a unique opportunity to examine how the omicron surge of the COVID-19 pandemic impacted fertility patients’ perceptions of vaccination and boosters. Results suggest that these decisions may be influenced by mistrust in the medical system, which may have implications for public health messaging and engagement strategies.
have lost their job due to the COVID-19 pandemic (p = .001) and reported concerns about vaccine side effects on miscarriage (p = .0006). Participants who received the educational material were more likely to know that pregnant women with COVID-19 had an increased risk of death (OR = 4.77, 95% CI: 2.07-10.91, p = .0017).

CONCLUSIONS: Two years after the onset of the COVID-19 pandemic, the majority of women in this study were vaccinated and had already received their booster dose. Participants with the greatest medical mistrust expressed concerns about COVID-19 vaccination and risk of miscarriages. The intervention increased patients' knowledge regarding maternal and fetal risks associated with COVID-19 infection.

IMPACT STATEMENT: Though the vaccination rate was significantly higher among the survey participants compared to the national vaccination rate, vaccine hesitancy was higher in patients with increased level of medical mistrust. Educational handout appears to be a reliable strategy to correctly inform patients on the risks associated with COVID-19 and pregnancy though they did not change vaccine hesitancy.

O-75 11:15 AM Monday, October 24, 2022

PROCEDURAL SPECIALISTS FAMILY BUILDING PATTERNS AND USE OF ASSISTED REPRODUCTIVE TECHNOLOGY. Padmaja Sundaram, B.A., Amelgia G. Kelly, MD,1 Morgan S. Levy, BS,1 Arghavan Salles, M.D,2 Vineet Arora, M.D,1 Albany Medical College, Irvine, CA; NYU Langone Health, NEW YORK, NY; Boynton Beach, FL; Stanford University; University of Chicago.

OBJECTIVE: Physicians in procedural specialties are likely to require longer training, work hours, and intensive physical demands relative to non-procedural ones. However, little is known about family building patterns of proceduralists. This cross-sectional study examines variations in the experience of infertility, family building, and usage of assisted reproductive technology (ART) between procedural and non-procedural physicians.

MATERIALS AND METHODS: Between April-May 2021, a sample of physicians and physicians-in-training were recruited through social media and organizational listservs to complete a questionnaire. Participants reported demographics and family building path, including experience with ART. Only current physicians that chose a specialty were included. Proceduralists were compared to non-procedural physicians. Analysis was conducted using SPSS 28, with statistical significance at p < .05.

RESULTS: Of the 2,510 qualifying respondents, 52.5% (n = 1319) were nonprocedural and 47.5% (n = 1191) were procedural. Top procedural specialties were Obstetrics and Gynecology, General Surgery, and Emergency Medicine; top nonprocedural specialties were Family Medicine, Pediatrics, and Internal Medicine. Procedural and nonprocedural specialists did not differ significantly by age, relationship status, sexual orientation, or rates of infertility. However, there were clear differences in the opportunities for family building between those in procedural vs non-procedural specialties. Proceduralists were more likely to be childless (40.1% vs. 36.1%, p < .001). They also reported fewer children (1.12 vs. 1.25, p < .015). Proceduralists were more likely to have children during residency (40.7% vs. 34.7%, p < .0001). Proceduralists were also more likely to use ART (26.9% vs. 22.7%, p = .024). Nonprocedural respondents spent more years trying to conceive prior to starting ART than proceduralists (3.34 vs. 3.10, p = .024). Amongst respondents who pursued ART, those in nonprocedural fields pursued more cycles than those in procedural fields (5.41 vs. 4.38, p = .034). Nonprocedural fields were more likely to use daycare as childcare (61.6% vs. 43.9%) (p < .0001), whereas those in procedural fields were more likely to rely on nannies (50.4% vs. 40.6%) (p < .0001).

CONCLUSIONS: This study demonstrates concerning differences in family building patterns between physicians in procedural vs non-procedural specialties. Procedural fields face a larger burden during family building and have less time to dedicate to trying to conceive with or without ART. Such discrepancies likely come at a financial and emotional cost. This warrants investigation into barriers procedural physicians face regarding family building as well as interventions to create more suitable environments for proceduralists who want to build families.

IMPACT STATEMENT: Those in procedural specialties face larger barriers in family building and the use of ART compared to those in non-procedural ones. This highlights a forced tradeoff between career and family, especially for those in procedural specialties.

O-76 11:30 AM Monday, October 24, 2022

MODERATE STEP COUNTS ARE ASSOCIATED WITH HIGHER RATES OF LIVE BIRTH IN SUBFERTILE WOMEN. Erica Johnstone, MD,1 Leah Cooper, MD, MS,1 Sunni L. Mumford, PhD,2 Amanda Allshouse, MS,1 University of Utah, Salt Lake City, UT; 2Rockville, MD; 1University of Utah, Denver, CO.

OBJECTIVE: We sought to determine the association between physical activity as measured by a Fitbit accelerometer and live birth in subfertile women.

MATERIALS AND METHODS: Women who had presented for evaluation and/or treatment for subfertility wore Fitbit wrist accelerometers, as part of the prospective IDEAL (impact of diet, exercise, and lifestyle) Fertility Study. In this study, women who were attempting to conceive with intercourse, with or without fertility medication, were included, while those undergoing intrauterine insemination or in vitro fertilization were excluded. Daily physical activity was quantified as total daily step count, minutes of sedentary time, and minutes spent lightly active, fairly active, and very active; activity levels were determined by a Fitbit algorithm. Activity was included from the 28 day period starting the first day of the last menstrual period for women who conceived, and for the first 30 days of study enrollment for women who did not conceive. Participants were categorized into quartiles according to each activity measure. Relationships between activity quartiles and live birth versus any other treatment outcome were assessed with logistic regression adjusted for maternal BMI, age, and blood pressure. Among the subset of women who conceived, chance of live birth versus pregnancy loss was compared with unadjusted logistic regression. P-values less than 0.05 were considered statistically significant.

RESULTS: Among n=467 participants, live birth occurred in 24% (n= 111). Live birth odds significantly differed with step count (p = .0001). The second and third quartiles of steps (5112-6687 and 6712-8445) were significantly associated with higher odds of live birth compared to 1st quartile of steps (1555-5109), as shown in Table 1. Conversely, the 4th quartile of steps (8502-20312) was associated with lower odds of livebirth (0.48, 0.27-0.87) than 3rd quartile of steps. Sedentary minutes and lightly active, fairly active, and very active minutes were not significantly associated with live birth. Among the subset of 150 women who conceived, no significant associations were found.

Table 1. Step quartiles and odds of live birth

| Quartile | Odds Ratio | 95% CI | P-value |
|----------|------------|-------|---------|
| Total steps | 0.0010 | |
| 2 vs 1 | 2.198 | 1.094 | 4.405 |
| 3 vs 1 | 3.831 | 1.953 | 7.519 |
| 4 vs 1 | 1.848 | 0.910 | 3.745 |
| 3 vs 2 | 1.745 | 0.974 | 3.125 |
| 4 vs 2 | 0.841 | 0.450 | 1.572 |
| 4 vs 3 | 0.482 | 0.268 | 0.868 |

CONCLUSIONS: Moderate daily step counts are associated with slightly higher odds of live birth among subfertile women.

IMPACT STATEMENT: Subfertile women attempting pregnancy may benefit from use of an accelerometer with a target daily step count of 5112 to 8445.

SUPPORT: NICHD Contract HHSN275201500001C.

O-77 11:45 AM Monday, October 24, 2022

AN EFFECTIVE TELEHEALTH BASED MULTIDISCIPLINARY APPROACH TO WEIGHT LOSS IN WOMEN WITH OBESITY SEEKING TREATMENT FOR INFERTILITY. Areta Bojko, M.D.,1 Denis A. Vaughan, M.D.,2 Denny Sakkas, Ph.D,3 David A. Ryley, M.D.,4 Florencia Ulaperin, M.D.,4 1Tufts Medical Center, Boston, MA; 2Boston IVF, Waltham, MA; 3Boston IVF-The Eugin Group, Waltham, MA; 4Boston IVF-The Eugin Group/Beth Israel Deaconess Medical Center/Harvard Medical School, Boston; 5Form Health, Boston, MA.

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