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PATIENT REACTIONS ON SOCIAL MEDIA TO THE ASRM COVID TREATMENTS SUSPENSIONS. Isaac J. Chamani, M.D., David H. McCulloh, Ph.D., Frederick L. Liciardi, M.D., NYU School of Medicine, New York, NY; NYU Langone Fertility Center, New York, NY; NYU Langone Health, New York, NY.

OBJECTIVE: On March 17, 2020, the American Society for Reproductive Medicine (ASRM) issued its initial recommendations regarding patient management and infertility treatment during the ongoing COVID-19 outbreak. Included were recommendations to suspend initiation of new treatment cycles, including those of patients of advanced age or diminished ovarian reserve. The purpose of this study was to survey patient opinions and reactions, as expressed on social media, to these recommendations and the three subsequent updates.

DESIGN: Cross sectional study.

MATERIALS AND METHODS: We surveyed “r/Infertility,” a group with 17,800 members on the social media site Reddit, for reactions following each of the initial four ASRM recommendations. Comments were made in individual “COVID/Coronavirus Mega Threads” on the days surrounding the March 17th, March 30th, April 13th, and April 24th announcements. We categorized posts based on their content, and quantified the number of posts per category. Categories included emotional reaction, resulting concerns, shared empathy, exchanges of advice and information.

RESULTS: 344 posts made by 148 users were categorized. The largest number of posts (n=90, 26.2%) expressed empathy to difficult news that was shared by another user. 82 posts (23.8%) discussed the future uncertainty, and 13 posts (3.8%) expressed an uncertainty in their clinic's present policy. The most common emotional reaction was of disappointment (n=38, 11.1%), but others also expressed anger, anxiety, and frustration (5.2%, 6.4%, and 7.3% respectively). A total of 23 posts (6.7%) expressed frustration specifically at treatment being cancelled mid-cycle.

A small number of comments questioned aspects of the guidelines, and expressed frustration with ASRM (7.2%), but more users expressed concerns regarding the risk of becoming pregnant (17, 4.9%), and none questioned the validity of the guidelines. A significant portion of users questioned whether patients with diminished ovarian reserve should be restricted as well, or whether they should be given priority when treatments resume (21, 6.1%). Several users questioned why the general population was not being cautioned regarding the risk of becoming pregnant (9, 2.6%), and also expressed annoyance regarding the risk of becoming pregnant (9, 2.6%).

CONCLUSIONS: Besides the fear of becoming sick, the economic burdens are the main reason for the delay in the motherhood plan, especially among women seeking for fertility care. This may be due to the fear of future economic instabilities and the fact that, in Brazil, ART do not qualify for economic benefits. Friends of Prentice

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MOTHERHOOD PLAN: HAS IT CHANGED IN FACE OF THE COVID-19 PANDEMICS? Daniela Paes de Almeida Ferreira Braga, PhD, Amanda Souza Setti, MSc, Assumpto Iaconelli, Jr., MD, Edson Borges, Jr., PhD, Fertility Medical Group / Sapienita Institute, Sao Paulo, Brazil.

OBJECTIVE: The novel coronavirus (Covid-19) outbreak led to a public health emergency of international concern, putting health organizations on alert. World authorities implemented suppression plans to control community spread, including restrictions to non-urgent medical care. Assisted reproduction centers had to adapt to these restrictions. The infertility diagnosis and reproductive treatments possess an inherent psychological burden. This associated with the uncertainty of the consequences of the passage of time in the prognosis of treatments may impact on patient’s psychological health. The goal for the present study was to investigate whether women seeking fertility care have different perception concerning the impact of Covid-19 on the motherhood plan than a target population?

DESIGN: Descriptive randomized study.

MATERIALS AND METHODS: From 22/April/2020 to 25/may/2020, a survey through an online-platform was conducted. Participants were randomized by age in one of the two groups: ART-GROUP (n=92), including patients seeking for fertility treatment, but still didn’t start their cycles or INTERESTED-GROUP (n=92), including participants interested in the subject, who accessed the website of a university-affiliated IVF-center. Participants in the ART-GROUP were invited via e-mail, with a cover-letter outlining the survey and a link to access it. Participants in the INTERESTED-GROUP accessed the questionnaire via website. Information on demographic data and their perceptions in face of the COVID-19 pandemics and the motherhood plan was collected. Women were asked: (i) How do you see the possibility of becoming pregnant after the beginning of the COVID-19 pandemic? (ii) How long do you think that suppression strategies will last? and (iii) Did you postpone your plans to become pregnant? If yes, why?

RESULTS: Most patients in the ART-GROUP were married or in a common-law relationship (83.6%), while a half of women in the INTERESTED-GROUP were in the same situation (50.0% p<0.001). When asked about the possibility of becoming pregnant, after the beginning of the pandemic, 47.8% of the ART-GROUP stated that they believed the pandemic could affect their plans, while only 28.2% of the INTERESTED-GROUP stated the same (p=0.035).

Concerning the duration of the suppression strategies, 64.1% of patients in ART-GROUP stated to believe the suppression strategies will be over by July, while only 18.5% of women in the INTERESTED-GROUP believed the same (p<0.001). The plan to become pregnant was postponed by 41.3% of the ART-GROUP and by 57.6.1% of the INTERESTED-GROUP (p<0.001). The main reasons that led people to this decision were fear of getting sick (52.6% vs. 73.6%, p=0.083, for ART-GROUP and INTERESTED-GROUP, respectively) and economic reasons (47.3% vs. 24.5%, p=0.085 for ART-GROUP and INTERESTED-GROUP, respectively).

CONCLUSIONS: Besides the fear of becoming sick, the economic burdens are the main reason for the delay in the motherhood plan, especially among women seeking for fertility care. This may be due to the fear of future economic instabilities and the fact that, in Brazil, ART do not qualify for reimbursement.

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USING VIDEO VISITS FOR NEW PATIENT EVALUATIONS DURING COVID-19. Juan J. Andino, MD, MBA, Alex Zhu, DO, Chad Ellimoottil, MD, MS, James M. Dupree, M.D., M.P.H., Michigan Medicine, Ann Arbor, MI; University of Michigan, Ann Arbor, MI.

OBJECTIVE: With the rapid expansion of telehealth use during COVID-19, we sought to assess what diagnoses were seen and which tests were pursued as part of the new patient evaluation. Herein we summarize a single institution’s experience with video visits for male infertility during COVID-19.

DESIGN: Retrospective case series of patients with male infertility managed via video visits.

MATERIALS AND METHODS: We identified video visits completed at our institution between March 23, 2020 and April 29, 2020 for male infertility. We included new patients and return visits for men 18 years of age or older completed by two andrology-trained urologists. We collected and categorized scheduled visit type; visit completion rate; patient demographic and referral information; primary diagnoses; and laboratory and imaging tests ordered for new patient evaluations.

RESULTS: There were 51 scheduled video visits with 21 (41.2%) new patient and 30 (58.8%) established patient encounters. Eight (15.7%) video
visits were cancelled—7 re-scheduled and 1 converted to a telephone encounter due to technical issues—and 6 (11.8%) were no-shows. The median age was 32 years (range 22–48) and most patients were referred by their primary care provider or their partner’s reproductive endocrinologist (53%) and 18%, respectively.

For the 38 completed video visits, primary diagnoses included 11 (29%) idiopathic cases, 11 (29%) endocrinologic derangements, and 9 (24%) cases had anatomic contributors to infertility such as varicocele, previous vasectomy, ejaculatory duct obstruction. Additional diagnoses included genetic abnormalities (5%), concurrent partner evaluation (5%), sperm DNA integrity concerns (3%), active infection with pyospermia (3%), and post-operative hematoth (3%).

Of the 17 completed new patient visits, most were diagnosed with idiopathic (35%) or anatomic (24%) conditions. Only 4 new patients (24%) had previously undergone an examination by a urologist. Eleven new patients (65%) required additional hormonal testing, 5 (29%) required another semen analysis, and 5 (29%) had scrotal ultrasound ordered due to inability to perform a physical exam due to limited use of outpatient clinics during COVID-19. Three (18%) required genetic testing, 2 (12%) a pituitary MRI, and 1 (6%) required DNA fragmentation testing.

CONCLUSIONS: Due to COVID-19, use of video visit has expanded to include new patient, male infertility evaluations. The most commonly ordered tests for these men included additional hormonal testing, additional semen analyses, and scrotal ultrasounds. While the physical exam is a crucial aspect of the infertility work-up, this series suggests that video visits could help ensure that a complete evaluation takes place even before a man undergoes a physical exam in clinic.

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COVID 19 PANDEMIC: ANXIETY AMONG PATIENTS WITH INFERTILITY IN IRAN. Elham Nisani Samani, MD, Farzaneh Nemati, MD 1University of Massachusetts, Amherst, MA; 2Qazvin University of Medical Sciences, Qazvin, MA, Iran (Islamic Republic of).

OBJECTIVE: A unprecedented spread of novel coronavirus disease (COVID-19) has influenced all over the world. However, the psychological effects of the pandemic on the general population, particularly patient with infertility, is lacking. The present study investigated the anxiety and worries in infertile patients during the COVID-19 outbreak.

DESIGN: Case-Control.

MATERIALS AND METHODS: Study was conducted using an online survey to assess anxiety and worries of patients with infertility who were being treated in a private Artificial Reproductive Technology (ART) center from 1th Jan to 15th March 2020. Two researchers followed up with the respondents, among whom 130 returned their questionnaires.

RESULTS: Among the responders, 92.30% (n=120, case group) obtained scores higher than 5 on the Beck Anxiety Inventory (BAI). Patients with infertility have shown statistically significant effects of COVID 19 on psychology, worries, and mean scores in the Beck Anxiety Inventory (BAI). Statistical analysis was performed using SPSS version 25. Chi-Square and Spearman correlation tests were applied to control confounders and assess the relation of the patient’s response concerning age and educational level.

CONCLUSIONS: This study revealed the effects of the Covid-19 pandemic on the anxiety level and worries of the patients with infertility. Our results illustrated effective strategies are needed to provide psychosocial support to these individuals during the crisis.

POSTER SESSION: CRYOPRESERVATION

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DISTURBANCE IN OOCYTE MEMBRANE LIPIDS DURING EQUILIBRATION STEP OF THE VITRIFICATION PROTOCOL. Thalita S. Bertelli, MSc, Eduardo D. Borges, MSc, Caroline M. Luz, MSc, Christina R. Ferreira, PhD, Paula A. Navarro, MD, PhD, Alessandra A. Vireque, PhD 1Faculdade de Medicina de Ribeirão Preto, Universidade de São Paulo - Departamento de Ginecologia e Obstetricia, Ribeirão Preto-SP, Brazil; 2Purdue University - Metabolic Profiling Facility, Bindley Bioscience Center, IN; 3Invitra – Assisted Reproductive Technologies LTD, Supera Innovation and Technology Park, Ribeirão Preto-SP, Brazil.

OBJECTIVE: In order to obtain a stable glassy state in the vitrification process, it is necessary to combine high cooling rates, small volumes of highly concentrated cryoprotectant solutions and short exposure times. During equilibration phase of oocyte vitrification, the exposure time varies from 10 to 15 minutes according to manufacturers’ recommendations and a dynamic flow of water and solutes occurs through plasma membrane, a step closely related to oocyte quality maintenance after warming. Studies investigating oocyte lipid profile, especially lipids related to membrane lipid bilayer, may be useful to evaluate the impact of the equilibration protocol of vitrification on oocyte cryotolerance. Here we report the feasibility of the targeted lipidomics using multiple reaction monitoring profiling (MRM-profiling) to investigate and monitor the impact of the exposure times to equilibration solution (ES) during vitrification on lipid profile of mice oocytes.

DESIGN: Experimental study.

MATERIALS AND METHODS: C57BL/6J mice oocytes (3 replicates; n=20 oocytes/group) were collected after superovulation with eCG and hCG and exposed to ES (Irvin Scientific) for distinct durations. The two groups were vitrified following the manufacturer recommended protocol: 10-minute total duration (oocytes stay for 6 minutes in third drop - ES10) or a shorter, 7-minute total protocol (oocytes stay for 3 minutes in the third drop - ES7). At the final step of equilibration, oocytes were washed 3 times in molten: H2O solution (1:3 v/v) and kept at -80°C until lipid extraction.

Lipids, equivalent to a pool of 5-7 oocytes per group/replicate were extracted using One Step Methanol protocol and flow injected into the triple quadrupole spectrometer equipped with an electrospray ion source (ESI-MS). Lipid classes were analyzed by MRM-profiling. The relative ion intensities values were evaluated using univariate analysis (fold change, t-test, volcano plot) and multivariate analysis (PCA, PLS-DA, cluster analysis). Most informative lipid species in each group were sorted out using the partial least square discriminant analysis (PLS-DA) variables of importance (VIP) scores > 1.

RESULTS: A relative ion intensity overrepresentations for saturated free fatty acids (C19:0, C20:0 and C22:0) was observed in ES10 (change fold: >2; p<0.05) when compared to ES7 group. In the PCA scores, ES7 and ES10 clusters were plotted showing a tendency of discrimination at PC1 (68,8% of variability explained) and 4 membrane phospholipids (phosphatidylycholines and sphingomyelins) classified by PLS-DA were downregulated in ES10, indicating the presence of lipid composition changes in mice oocyte membrane due to amount of equilibration time used for the vitrification protocol.

CONCLUSIONS: Even slight changes in vitrification protocol such as the duration of the equilibration phase impacted the lipid profile of mice oocytes and could be monitored by MRM-profiling. Our results indicate that shorter time exposure in ES compared to long equilibration recommended by the manufacturer (7 min versus 10 min, respectively) is related to less disturbance of the plasma membrane of mice oocytes.

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IMPACT OF OOCYTE VITRIFICATION AND SUPPLEMENTATION OF THE VITRIFICATION MEDIA WITH ANTIOXIDANTS AND FATTY ACIDS ON LIPID PROFILE OF MICE BLASTOCYSTS. Thalita S. Bertelli, MSc, Eduardo D. Borges, MSc, Caroline M. Luz, MSc, Christina R. Ferreira, PhD, Alessandra A. Vireque, PhD, Paula A. Navarro, MD, PhD 1Faculdade de Medicina de Ribeirão Preto, Universidade de São Paulo - Departamento de Ginecologia e Obstetricia, Ribeirão Preto-SP, Brazil; 2Purdue University - Metabolic Profiling Facility, Bindley Bioscience Center, IN; 3Invitra – Assisted Reproductive Technologies LTD, Supera Innovation and Technology Park, Ribeirão Preto-SP, Brazil.

OBJECTIVE: To investigate the impact of oocyte vitrification on lipid profile of mice blastocysts by comparing blastocysts originated from fresh and from vitrified oocytes subjected to in vitro fertilization. Also, to assess the effects of supplementing the vitrification media with antioxidants and unsaturated fatty acids by comparing blastocysts vitrified with Irvine Scientific, a