Celebrating Women in Medicine

Women in Medicine Month 2018 is drawing to a close. Though last year seemed a landmark year in recent memory for how many headlines focused on “women’s issues,” 2018 has only continued the trend. From #MeToo to the continued onslaught of legislation attacking reproductive rights, we have seen an astounding array of stories come to light.

Some have arisen in surprising ways—like upending the storied hierarchy in medicine through tales shared by female physicians and scientists of workplace misogyny or misconduct, or new attempts to assign personhood to embryos in light of the tragic storage tank failure in Ohio. However, I will look back on this year that was actually positive for women. In the past 12 months, I have witnessed the explosion of online and IRL advocacy for women’s health. Whether through specialized Facebook groups, more and more #SoMeDocs (doctors using social media for educational purposes), patients sharing their fertility journeys through Instagram and Twitter, the first PCOS Advocacy Day, and enhanced advocacy for PCOS, endometriosis, mental health and maternal health—I think the energy of women is revolutionizing how we think and talk about diagnoses, diseases and our quality of life as patients, clinicians and people.

I am truly excited to see where this momentum leads us to next!

In that vein, I have some humble requests of our membership as to ways we all can continue feeding the movement in our day-to-day lives:

- Stand up for your colleagues, across job titles and departments, if you see bias or misogyny in the workforce or online.
- Take the time to make sure your patients truly understand their diagnoses and treatment plans—many of our findings have long-term health implications and we can empower patients to be healthier during pregnancy and beyond.
- Be a mentor. However formally or informally, share your wisdom and experience freely—"empowered women empower women!"

Ways to Be Involved with the Women’s Council

- Please join us for the annual WC Breakfast at the ASRM Congress, with featured speaker, Dr. Nanette Santoro.
- This year’s nomination window has passed, but nominate yourself or a colleague for the ASRM WC Distinguished Service award—this is a great opportunity to be recognized by the Society.
- Inspired by this issue's articles? Submit a piece for a future newsletter.
- Invite a friend or colleague to join the WC or attend the breakfast with you!
**Lifestyle Considerations for the Infertility Patient**

**“Should I become gluten-free?”**

**“Should I cut out caffeine completely?”**

**“Is my high-stress lifestyle causing infertility?”**

Patients pose these questions daily in my infertility practice. Many become convinced, after reading a multitude of online information, that certain dietary and environmental/lifestyle habits are detrimental or helpful during fertility treatment. Unfortunately, randomized controlled trials that evaluate lifestyle modifications in the fertility patient are difficult to find. As reproductive endocrinologists, we can certainly help guide our patients based on the available literature and debunk myths propagated online.

**Should I go gluten-free?**

Gluten is a storage protein composite in certain types of wheat, barley, and rye. True celiac disease, or autoimmune reaction to gluten, occurs in one to three percent of the general population. It affects multiple organs and is associated with malabsorption and osteoporosis. More commonly, women experience non-celiac gluten sensitivity (NCGS), with gastrointestinal symptoms mirroring irritable bowel syndrome, but also non-GI symptoms such as headache and allergy-related symptoms. The prevalence of NCGS is estimated to be between six and 10 percent of women, but self-diagnosis and poor reporting measures make a true estimation difficult. Infertility patients using the internet as their information source regarding infertility diagnosis and treatment will be bombarded with websites labeling sensitivity to gluten as a contributor (or even the source) of infertility. Interestingly, an observational study performed at RMA – New Jersey showed no higher incidence of seropositive celiac disease in a population of women undergoing IVF than in the general population. In addition, seropositive women had similar IVF outcomes compared with the seronegative group. Equally compelling, a Canadian study showed no higher incidence in celiac disease in patients with unexplained infertility when compared with those whose infertility cause was identified. There are very little data regarding infertility and NCGS, as this diagnosis is mainly self-reported by patients. Based on the current literature, a gluten-free diet probably will not greatly impact the reproductive outcomes in the majority of women. I recommend infertility patients adhere to a sensible diet that is low in saturated fat and refined sugars. For those with insulin resistance and/or PCOS, adherence to a low-carbohydrate diet is recommended.

**Should I quit caffeine?**

Daily caffeine intake is common among reproductive-aged women, and many infertility patients worry consumption may be a contributor to infertility. A handful of research studies have addressed this issue over the years. Most show that moderate caffeine use (< 200 mg/day) is not associated with infertility or poor response to fertility treatment. That being said, significant caffeine intake was associated with a small increased risk of early miscarriage. For these reasons, recommending infertility patients follow the American College of Obstetricians and Gynecologists (ACOG) suggestion to limit caffeine intake to < 200 mg/day seems reasonable. Complete cessation of caffeine use is ideal and may give patients more peace of mind.

**Stress and Infertility**

“My mother says my high-stress job is causing my infertility. Should I quit my job?”

Infertility patients are inundated with advice from friends, family members, and online sources, and daily stress seems to be a common topic of conversation. Based on the available literature, women with high-stress occupations do not experience infertility more readily. Similarly, in patients undergoing assisted reproductive technologies, those with higher levels of perceived stress and even elevated biomarkers of stress, achieved pregnancy as often as those with lower stress levels. infertility treatment can cause increased stress among patients, so stress management during treatment can be very helpful. Minimizing daily stress increases the quality of life in patients in general, but daily, job-related stress likely does not cause infertility. I generally recommend patients engage in activities geared toward stress relief during infertility treatment: yoga, meditation, acupuncture, massage, therapy, etc. Empowering patients to combat stress may mean a better overall experience during treatment.

Patients facing infertility often look to lifestyle factors to be contributors to the inability to achieve pregnancy. While some factors have proven to be probable contributors, obesity and heavy smoking for example, others do not seem to play a primary role. Our role as infertility specialists is to help patients delineate myth from reality regarding these issues.
Communication of IVF Procedures & Outcomes: Who is Responsible?

As the technological complexities of ART continue to advance, as well as accessibility to infertility treatment, IVF professionals must consider the increasing significance of how laboratory procedures and outcomes are best conveyed to patients. As an embryologist working in multiple clinics and laboratories, and now as a laboratory director, I am acutely aware of the discussion of embryologist involvement with patient care among physicians, embryologists, nurses, etc. The question being: are embryologists highly skilled and trained lab technicians indirectly involved in patient care, or are we the best resource to elucidate the complicated laboratory processes and outcomes of IVF? In general, the embryologist, looking through the microscope and evaluating embryos, has performed that exact task hundreds or thousands of times, and assessed thousands or tens of thousands of embryos. However, rarely do embryologists or even laboratory directors receive any training in bedside manner or patient care. Over the years, I have worked with and debated this topic with many IVF professionals, and have found the opinions rather diverse.

One side of the debate is the belief that due to limited patient care training and interaction with patients, embryologists should perform their job function similar to a reference lab technician by executing a task, but should not communicate nor interpret the outcome. In this situation, the nurse typically assumes the responsibility of relaying the information from lab to patient. This strategy primarily benefits the embryologist, as it is significantly less work and offers a layer of protection and anonymity from the patient should the outcome be less than ideal or if an error occurs. Additionally, with an unsuccessful outcome, the physician or nurse can proceed with recommendations and subsequent treatment steps. It also can be argued that this benefits the patients, as their points of contact are limited and consistent.

The other side of the debate is the belief that the expertise and direct knowledge from the embryologist greatly increases the connection and overall ease the patient feels going through the IVF process. Allowing patients access to, and the opportunity to ask the inevitable questions of the group of people creating and evaluating their embryos can be advantageous to the patients. This relationship benefits the embryologist as well, by according her a greater sense of responsibility and accountability. When information about embryo development and outcome is relayed from embryologist to non-embryologist, and then explained to the patient, it is possible for the specifics to get lost in translation. Similarly, an embryologist explaining treatment strategies or medication schedules might have the same effect; the people to best explain those topics with patients are the experts who focus on those issues everyday.

While there is validity in both arguments, I personally believe, if given the proper training, the direct involvement of the embryologist brings an informative and comforting experience to the IVF patient, unique from any other medical treatment. Furthermore, embryologist involvement is obligatory as confirmation of care plans and patient identification are mandatory prior to IVF procedures. One example of this: prior to an oocyte retrieval, I reviewed the treatment plan with a first-time IVF couple. After a brief discussion, a very nervous husband took his equally nervous wife’s hand and in all seriousness said, “Don’t worry honey, everything is going to be ok, our doctor is an Aggie.” As a graduate of Texas A&M University, I always wore my class ring, recognizable by all current and former students. As it turned out, both patients were also Texas A&M graduates. This recognition generated a trusted connection which resulted in a collective laugh and led to a calming, less stressful situation for what can typically be somewhat overwhelming. While there is no assured connection as I experienced, direct communication has the ability to ease anxiety for patients and potentially improve outcomes.

While undoubtedly the debate will continue and opinions will always differ, we as medical professionals must see patient care through patient eyes and remember that ART is exceedingly complex and confusing…”

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The Androgen Excess & PCOS Society Announces

Creation of New Early Career Special Interest Group

Call for Inaugural Members

The Androgen Excess and PCOS (AE-PCOS) Society is pleased to announce its creation of a new Early Career Special Interest Group (SIG), effective July 1, 2018. The mission of the SIG is to provide greater opportunities for professional development and networking to early career members of the AE-PCOS Society. The group is open to Associate Members of the Society who are students (at any level), medical residents, and fellows in medicine, allied health, or basic sciences; as well as academic faculty/practitioners who are in the first three years of their permanent appointment.

Benefits to SIG members include:

• Discounted registration fees for future annual meetings;
• Exclusive eligibility for travel awards to the annual meetings;
• Exclusive eligibility to attend meet-the-professor sessions at annual and update meetings;

The Early Career SIG will be featured at the AE-PCOS Society’s annual meeting, held September 23–25, 2018 at the Biomedicum at Karolinska Institutet in Stockholm, Sweden. The meeting will include a short introductory presentation and representatives will host an exhibit booth or breakout session wherein interested individuals can learn more about joining the group.

The AE-PCOS Society is an international organization dedicated to promoting the generation and dissemination of knowledge related to all aspects of androgen excess disorders. Support of our Early Career Members – who represent the future leaders of our field – is central to this mission. We kindly urge members of American Society for Reproductive Medicine to disseminate word of this SIG to their trainees, mentees and academic program affiliates. Encourage them to participate so as to ensure the success of this new, exciting and important initiative!

AE-PCOS Society Early Career SIG Contact: Those interested in joining and/or learning more about the Early Career SIG should contact Marla E. Lujan: marla.lujan@cornell.edu.

Online Resources for Women in Medicine Month

American Medical Association: https://www.ama-assn.org/women-medicine-month
https://wire.ama-assn.org/ama-news/7-ways-you-should-celebrate-women-medicine-month
National Institutes of Health: https://orwh.od.nih.gov/about/director/messages/women-in-medicine-month/
Association of American Medical Colleges: https://students-residents.aamc.org/choosing-medical-career/article/celebrating-women-medicine-month/

Closing thoughts from our Women’s Council Chair, Dr. Erika B. Johnston-MacAnanny, M.D.

“Women in their mid-career years may struggle to connect with millennials and their younger colleagues, and have not yet risen to the top rungs of leadership. But, don’t forget your valuable experience! You have much to offer as a mentor and role model!”