NEWS AND VIEWS

CONTROVERSIES IN ASSISTED REPRODUCTION

Infertility: The Impact of Stress, the Benefit of Counseling

*The simple union of man and wife
in love creates a brand new life.
A child to cherish, play with, and be
their link with immortality.*

*What bliss and joy they anticipate!
Unless infertility becomes their fate
and buries dreams that die within
as they mourn their child who might have been.*

Machelle Seibel, M.D.

Men and women often strive for greatness to leave their mark on the world. However, as the above poem implies, everyone has the potential for immortality through their children. It is an atavistic desire, imbued within the heart and soul of most individuals. A genetic legacy that links one's past with one's future.

It is no wonder that the desire to have a child is among the strongest that people experience, and no less surprising that infertility is ranked among life's greatest stresses, similar in intensity to having a life-threatening illness (1).

The association between emotions and infertility has been appreciated since biblical times, as illustrated by the story of Hannah from the first chapter of the first book of Samuel.

A man named Elkanah had two wives: Peninah, who had many children, and Hannah, who was ridiculed by Peninah for her inability to conceive. Eventually, Hannah became so distressed she would not eat. She prayed and wept bitterly; her lips moved, but she was unable to utter a sound.

A priest saw her in this state and accused her of drunkenness. But when Hannah explained the reason for her sorrow, the priest said to her, "Go in peace, May the God of Israel grant your petition." Comforted and calmed, Hannah returned home, began to eat, and shortly thereafter conceived a son, Samuel.

Unfortunately, because infertility involves the loss of something that has never been, it is a loss that often goes unnoticed. Perhaps that is why infertile couples have been called the most neglected silent minority (2).

Every aspect of infertility lends itself to stress. Not only the well-characterized stresses such as loss of self-esteem and higher levels of depressive symptoms, anxiety, sexual dysfunction, and cognitive dysfunction (3), but other more subtle stresses as well.

For instance, finding time to be tested and treated, especially couples both needing to work, can lead to fear of job or revenue loss for repetitive time away. The anticipation associated with the belief that one will conceive at any time also tends to prevent couples, especially women, from advancing at work in order to reduce further job-related responsibilities that would interfere with their infertility evaluation and treatment. People also remain in jobs they would otherwise leave in order to remain insured.

Furthermore, the fact that our planet is overpopulated allows governments to instill guilt among couples for considering their infertility a problem and allows insurers a vehicle to limit infertility coverage. Instead of viewing infertility as a health care problem not unlike any other, amenable to treatment and deserving of it, infertility is often relegated to a luxury that is too expensive (4).

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Those who argue against health care coverage for infertility suggest that individuals would abuse the privilege of having it and, for instance, go on to repeat six or more cycles of in vitro fertilization if necessary. This does not appear to be the reality. In Massachusetts, where in vitro fertilization is a procedure with coverage mandated by insurance companies, and most patients can be treated without restriction, 73% of patients have the procedure only three times or less, and 84% of all cycles performed occur in patients having the procedure no more than four times (5). These statistics speak to the substantial physical and emotional strain that in vitro fertilization places on patients. The fact that more than 95% of babies resulting from in vitro fertilization occur within four cycles suggests strongly that the likelihood of success and the ability to endure treatment lead to a self-motivated cessation of treatment (6).

One recent issue that has increased the stress associated with infertility is the potential association between fertility drugs and ovarian cancer (7). It is beyond the scope of this article to address the merit or need for such concern. However, it can safely be stated that even the most remote prospect of cancer superimposed on the already stressful backdrop of infertility greatly intensifies patient's anxiety. Patients who have not received ovulation induction in more than a decade still call me for information or reassurance concerning their cancer risk. Until this question achieves absolute resolution, it will continue to generate additional anxiety among our patients. Such concerns are even more stressful when practitioners discuss medications with potential egg donors who receive the medication without benefit to themselves (8).

Patients in need of ovulation induction also require extensive counseling to inform and to allay anxiety regarding cancer risk, ovarian hyperstimulation, thrombosis, and multiple births (9). Fear of the latter risk often creates the most anxiety as patients hoping to conceive one child suddenly find themselves afraid they may succeed too well. Even asking patients to administer their own injections creates anxiety for some.

Other circumstances have occurred that increase the stress of infertility treatment. One has to do with patient confidence in our specialty. It is difficult to quantify the substantial loss of respect and trust that resulted from the recent allegations of wrongdoing concerning a fertility center giving one couple's embryos to another without their

knowledge (10). If found to be true, the situation will likely be considered a legal problem rather than an ethical one. Regardless of outcome, the resulting erosion of the infertility doctor relationship will take a long time to repair. In the meantime, our patient's anxiety will spill over to become our own and add an underlying level of stress for both providers and patients.

Stress is also created as patients struggle with coming to closure with their infertility (11). Procedures such as egg donation, gestational carriers, gestational surrogacy, intracytoplasmic sperm injection, and sperm donation provide credibility to the notion that boundaries no longer exist to reproduction. Neither gametes nor reproductive organs are essential requisites to family building. As such, infertile couples must often make medical choices without benefit of long-term social follow-up because, for most of these procedures, none yet exists. The stresses associated with this aspect of reproductive technologies may be long-term and ongoing.

In addition, infertile couples, even those who succeed, often continue to view themselves as infertile, experiencing both much more anxiety about pregnancy and delivery than fertile couples and difficulty fantasizing about their pregnancy. They often display their anxiety by not buying baby clothes and not preparing their baby's room in advance (12).

Stress has also been shown to have a negative impact on pregnancy. Women desiring an abortion but denied it experience a higher rate of babies born with abnormalities (13). Another study performed in Scandinavia identified a higher rate of health and behavior problems among the adult children of women who were widowed during pregnancy compared with those whose fathers died shortly after birth (14).

Because of the high level of stress experienced by infertile couples, even after they become pregnant, it is not surprising that health care providers working with infertile couples, especially nurse coordinators, experience a high degree of professional burnout. Eventually, the demands of infertile patients and their need for ongoing nurturing take their toll on even the most resilient (15).

How best, then, can we provide stress reduction for our patients? While no one simple answer can be provided, and individuals experience stress differently, a number of approaches can be helpful.

First and foremost is information. Providing adequate time and personnel to explain procedures

and their accompanying risks is essential. Included in this explanation must be a discussion of the risks of fertility drugs, alternatives involving less medication, explanation of donor selection, and information about the donor (where appropriate), how embryos are kept, stored, and deposited, and expectation of costs and time commitment, to name only a few. Providing this type of in-depth discussion will become increasingly challenging in this era of cost containment, where the emphasis is placed on speed of patient visits.

Behavioral techniques such as relaxation training, stress management, and nutritional and exercise counseling may also be helpful (16). With these techniques, our patients have demonstrated significantly reduced anxiety, depression, and anxiety and an increased sense of well-being.

Another method of reducing stress is to work with a mental health provider as part of the infertility team. All assisted reproductive technology patients in our program are required to see a member of our mental health team. Doing so allows patients to voice concerns they do not always state to their infertility doctor. It also provides a contact for the couple in the event that psychological problems evolve in the future. Because the psychological consequences of infertility may persist beyond conception, counseling may be most beneficial if it is continued beyond conception throughout pregnancy.

Finally, it is important to help our patients come to closure. Couples should be encouraged to consider both adoption and child-free living as real choices, and not as failure. Like all other forms of resolving infertility, they deserve special psychological attention. This is a particularly important concept in reproductive medicine because, for all forms of treatment, not all patients achieve pregnancy. Preparing and handling this aspect of our patient's care are among our most important challenges if our patients are to remain feeling good about themselves and go on with their lives.

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