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CME CREDIT HOURS

Recognizing the stress of infertility

KEY POINTS:

An estimated 12% of US couples experience infertility problems.

Primary care physicians play a key role by making appropriate referrals and providing emotional support.

Infertility can lead to a variety of stress reactions, including a feeling of losing control, loss of self-esteem, financial strain, and marital and family tension.

There are a number of resources available in the community to assist couples coping with infertility.

ABSTRACT: Although infertility is often blamed on stress, the evidence that psychological factors interfere with conception is slim. Far more salient is the stress that infertility imposes on patients and their marriages. Primary care physicians can help by recognizing stress associated with infertility and making appropriate referrals for psychological support.

As the story of Abraham and Sarah instructs us, infertility has caused grief and stress since recorded history began. In this Old Testament story, the couple remains childless until they are quite old and despair of ever having a child; Abraham finally has a son, Ishmael, through a surrogate mother, his wife's servant Hagar, and then conceives a son, Isaac, with Sarah through divine intervention (Genesis 21:1–7). This early example of third-party reproduction is said to have laid the foundation for today's Middle Eastern conflicts.

Despite modern technology for assisted reproduction, infertility affects an estimated 12% of couples in the United States today.[1] In fact, owing to factors such as endometriosis, delayed childbearing, and sexually transmitted diseases, infertility among women in the United States appears to have increased in prevalence in the last 20 years; infertile women numbered more than 5 million in 1995.[2]

The number of infertile women is expected to increase only slightly over the next 20 years, but scientists are debating whether men's sperm counts and motility are declining by an alarming degree in the industrialized world.[3] Thus, primary care physicians are bound to see a number of patients in daily practice who are struggling with infertility.

DOES STRESS CAUSE INFERTILITY?

According to folk wisdom, stress is a common cause of infertility. Family members, friends, and even concerned physicians typically advise couples to "just relax," "take a vacation," or "forget about it," in the hopes that pregnancy will ensue.

In theory, stress could interfere with conception by disrupting hormonal cycles or by impairing a couple's capacity to have effective sexual intercourse or comply in other ways with infertility treatment

TABLE

HELP WITH INFERTILITY: WHOM TO CONTACT

Resolve
1310 Broadway
Somerville, MA 02144-1731
National support and information network for infertile couples

Society for Assisted Reproductive Technology
1209 Montgomery Hwy
Birmingham, AL 35216-2809
Provides regional reports on the success of individual infertility clinics

American Association for Sex Educators, Counselors, and Therapists (AASECT)
435 North Michigan Ave, Suite 1717
Chicago, IL 60611
Directory of sex therapists

Society for Sex Therapy and Research (SSTAR)
Blanche Freund, PhD
419 Poinciana Island Dr
North Miami Beach, FL 33160-4531
Directory of sex therapists

American Society for Reproductive Medicine
1209 Montgomery Hwy
Birmingham, AL 35216-2809
Can send a fact sheet on adoption

regimens.[4] Some comprehensive treatment programs are attempting to use stress management techniques to improve pregnancy rates.[5]

However, the empirical evidence that stress interferes with pregnancy is quite weak. Although some small studies suggested that distressed women undergoing in vitro fertilization are less likely to become pregnant,[6] a detailed prospective study in which women kept daily stress diaries suggested that a different pattern of cause and effect could explain the association of stress and low pregnancy rates. Women who did not become pregnant were indeed more distressed, but only on days on which they received negative feedback from the infertility program on the progress of their cycle.[7] It was the medical omens of failure that led to the psychological distress.

Given the many pregnancies that occur during wartime or under conditions of danger and deprivation in refugee camps, common sense suggests that stress cannot be a very strong factor in preventing conception.

INFERTILITY DOES CAUSE STRESS

Although the role of stress in causing infertility is debatable, mental health professionals have long recognized the stress that ensues for individuals and couples when infertility is diagnosed.[8] Listed below are some of the most common sources of stress that are related to infertility, and how primary care physicians can help.

Uncertainty about the success of infertility treatment

Despite advances in infertility treatment, success is far from guaranteed. For patients who require the most sophisticated treatment—in vitro fertilization—success rates in recent years have remained constant at about 20% nationally.[9] To add to patients' anxieties, stories about greed and mismanagement at infertility clinics periodically grab headlines. Couples are unsure whom to trust, and often seek information from books, the Internet, and acquaintances. For women in particular, each menstrual cycle becomes a roller coaster of hope and disappointment.

How to help. Primary care physicians can provide important guidance and reassurance to couples embarking on infertility treatment. The physician can share his or her knowledge about resources in the community, or help the couple to get an appropriate specialty referral within a managed care system. The physician can also refer patients to Resolve, the national support and information network for infertile couples (TABLE). Couples can also order regional reports on the success of individual infertility clinics by contacting the Society for Assisted Reproduction (TABLE).

The feeling of losing control

Fertility, like health, is something we tend to take for granted. A diagnosis of infertility often comes as a shock to otherwise healthy young persons. For others, such as cancer survivors or those born with congenital anomalies, infertility may have been expected, but nevertheless feels like insult added to injury. Loss of control over such a basic physical function is tremendously frustrating. Successful middle class couples in their 30s, who are the typical patients in infertility clinics, expect to achieve their life goals through hard work and persistence. With infertility, however, success may remain out of reach despite all their best efforts.

How to help. The primary care physician can provide emotional support by staying informed about the progress of the infertility evaluation and treatment and offering encour-

agement and empathy to the couple. Some couples may need a referral to a mental health professional experienced in treating the stress that accompanies infertility. These clinicians are often affiliated with local infertility treatment programs or may be known to coordinators of Resolve chapters.

Financial strain

Treatment for infertility is often a financial strain for couples, given the limited insurance coverage for these problems. With the advent of managed care, infertility treatment is increasingly an out-of-pocket expense.[10] The cost of treatment can influence the options a couple chooses, such as, in the case of severe male factor infertility, whether to pursue costly in vitro fertilization (at approximately $4000 per cycle) or to use donor sperm instead (approximately $400 per cycle).[11] Financial issues can also lead to marital tensions when partners disagree about whether to take the gamble of investing in expensive infertility therapies.

How to help. The primary care physician cannot decrease the cost of infertility treatment, but he or she can inform couples about how much different infertility programs in the community cost, write letters to the patient's insurance carrier or managed care company asking them to pay for the patient's infertility treatment, and consider joining political groups advocating better insurance coverage for infertility care.

Loss of self-esteem

Infertility causes many men and women to doubt their own self-worth, as they experience the diagnosis as a loss of masculinity or femininity. Often, the spouse labeled as "the problem" offers to divorce the fertile partner so that he or she can find a mate who can provide offspring. Women who have had sexually transmitted diseases or elective abortions often feel intense guilt, even if there is no clear link between the past event and the present infertility. Couples often find it painful to be around infants and toddlers, making each baby shower or family gathering a new trauma.

How to help. The primary care physician familiar with these emotional reactions can ask patients about their experiences and provide reassurance that their feelings are normal under the circumstances. Persistent guilt and anxiety may signal a need for a referral for psychotherapy.

Marital stress

Infertility seems to amplify both the strengths and the weaknesses in a marriage. Couples who have a solid commitment and good communication typically say that infertility brought them closer together and helped them to define what was valuable in their relationship besides their wish to be parents. On the other hand, fragile marriages become even more vulnerable, and affairs or even separations can occur. One spouse may blame the other for the infertility. Often, one partner wants to pursue treatment aggressively while the other is more reluctant.

Because infertile couples want a baby so badly, they may be unprepared for the stress of parenthood when pregnancy does occur. One recent study in women who had experienced fertility problems found that although their general well-being increased with parenthood, their marital and sexual satisfaction decreased, the same as for women who become mothers without a struggle.[12]

How to help. The primary care physician can be alert to these patterns and offer brief counseling or a referral for more intensive mental health care.

Sexual pressure

When couples experience prolonged infertility, their sex life often suffers.[13] Having sex on demand at midcycle reduces lovemaking to a mechanical exercise and can lead to transient anxiety-based problems for men in getting erections or ejaculating. Chronic forms of sexual dysfunction can also be hidden causes of infertility; these include erectile dysfunction, difficulty for men in reaching orgasm intravaginally, and marriages unconsummated because of severe vaginismus. Not only do patients endure the discomfort and embarrassment of frequent genital examinations, but infertility evaluations such as semen analysis or the postcoital test actually involve sexual acts. Patients often come to feel that their sexuality has become "medicalized" out of existence.

Each menstrual cycle becomes a roller coaster of hope and disappointment

How to help. Primary care physicians can identify such sexual problems by asking about the impact of the infertility on the couple's sexual practices. When sexual dysfunction is preventing conception, a skilled sex therapist may be able to treat the problem. The primary care physician can find out which mental health professionals in the community have specialty training in this area.

Sex therapy specialists may be found in large hospitals or on the faculty of medical

schools in psychiatry, gynecology, or urology. Directories of sex therapists are also available by geographic area from professional organizations such as the American Association for Sex Educators, Counselors, and Therapists or the Society for Sex Therapy and Research (TABLE).

Family pressure

The parents and other relatives of an infertile couple often add to the stress by insensitive reminders that they are waiting to see a pregnancy. Sometimes the relatives do not know about the problem because the couple conceal it. Spouses may also disagree on how much to disclose to parents and siblings—a particularly sensitive issue if they are considering gamete donation. One spouse may feel blamed by the in-laws for the childless status.

How to help. A primary care physician cannot easily change communication patterns within a patient's family, but can encourage patients to be assertive with people who nag them to have children. It is sometimes helpful to talk with each spouse separately. The physician is a safer confidant than a family member or friend, who may disclose too much to others.

Grieving for lost offspring

Sometimes couples suffer a miscarriage or perinatal death. Emotional support tends to be fairly good at these times, although family and friends commonly trivialize a couple's grief over a first trimester pregnancy loss. Couples often receive even less acknowledgement that the lack of any pregnancy is also a legitimate loss. When they stop infertility treatment, even if they plan to pursue adoption, couples need to grieve over their lost dream of a mutual child.

How to help. The family and caregivers need to encourage this normal mourning process. The primary care physician can also give realistic guidance to couples facing choices about pursuing more infertility treatment. The physician can provide information about adoption to couples; a fact sheet on adoption is available from the American Society for Reproductive Medicine (TABLE).

Primary care physicians provide the emotional support that is possible only in a consistent, physician-patient relationship

THE IMPORTANCE OF PRIMARY CARE PROVIDERS TO INFERTILE COUPLES

According to estimates, only half of infertile couples in the United States seek treatment.[14] For those who do, satisfaction with treatment depends mainly on the couple's confidence in their specialists' technical skills and on their perception of emotional support from the treatment team.[14] Primary care physicians are a crucial link in the process of overcoming infertility because they help patients choose a specialist and provide the emotional support that is only possible within a consistent, ongoing physician-patient relationship. ■

REFERENCES

1. Mosher W, Pratt W. Fecundity and infertility in the United States, 1965–1988. Adv Data 1990; 192:1–12.
2. Stephen EH. Projections of impaired fecundity among women in the United States: 1995 to 2020. Fertil Steril 1996; 66:205–209.
3. Carlsen E, Giwercman A, Skakkebaek NE: Editorial: Declining sperm counts and increasing incidence of testicular cancer and other gonadal disorders: Is there a connection? Ir Med J 1993; 86:85–86.
4. Schenker JG, Melrow D, Schenker E. Stress and human reproduction. Eur J Obstet Gynecol Reprod Biol 1992; 45:1–8.
5. Domar AD, Zuttermeister PC, Seibel M, Benson H. Psychological improvement in infertile women after behavioral treatment: a replication. Fertil Steril 1992; 58:144–147.
6. Demyttenaere K, Nijs P, Evers-Kiebooms G, Koninckx PR. Coping and the ineffectiveness of coping influence the outcome of in vitro fertilization through stress responses. Psychoneuroendocrinology 1992; 17:655–665.
7. Boivin J, Takefman JE. Stress level across stages of in vitro fertilization in subsequently pregnant and nonpregnant women. Fertil Steril 1995; 64:801–810.
8. Burns LH. An overview of the psychology of infertility: comprehensive psychosocial history of infertility. Infertil Reprod Med Clin North Am 1993; 4:433–454.
9. Society for Assisted Reproductive Technology and The American Society for Reproductive Medicine. Assisted reproductive technology in the United States and Canada: 1994 results generated from the American Society for Reproductive Medicine/Society for Assisted Reproductive Technology Registry. Fertil Steril 1996; 66:697–705.
10. DeCherney AH. Infertility: We're not taking new patients! Fertil Steril 1995; 64:470–473.
11. Schover LR, Thomas AJ, Miller KF, Falcone T, Attaran M, Goldberg J. Preferences for intracytoplasmic sperm injection (ICSI) vs donor insemination (DI) in severe male factor infertility: a preliminary report. Hum Reprod 1996; 11:101–104.
12. Abbey A, Andrews FM, Halman LJ. Infertility and parenthood: does becoming a parent increase well-being? J Consult Clin Psychol 1994; 62:398–403.
13. Reading AE. Sexual aspects of infertility and its treatment. Infertil Reprod Med Clin North Am 1993; 4:559–568.
14. Halman LJ, Abbey A, Andrews FM. Why are couples satisfied with infertility treatment? Fertil Steril 1993;59: 1046–1054.

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