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14.1 Introduction and Aims

Coping is derived from “to cope with” and refers to the way people deal with stressful situations. The process starts with an event that is primarily appraised by the individual as *threatening, harmful, or challenging* [1]. This definition shows that in the case of a couple facing infertility, both partners can show different evaluations of the “nonevent transition” that characterizes infertility, which therefore can be defined as a chronic stressor [2]. In the secondary appraisal step, the individual assesses if he/she is able to cope with the consequences of that event. In a third step (“reappraisal”) the individual evaluates if his/her coping abilities and strategies have been successful or not. This chronological description shows that coping is an endless dynamic process of appraisal and reappraisal, which is influenced by many factors. Because the period in which a couple is suffering from infertility encompasses many stressful moments and events, it is difficult, if not impossible, to determine exactly “what causes what.” According to the literature, successful coping in this situation of infertility is mainly influenced by the history of the desire for a child, the medical diagnosis, the patients’ estimations of treatment success, and the actual strategies of both partners of the couple. As described later, the coping strategies of both partners of the couple are mutually dependent.

As Kentenich and coworkers indicate, doctor and patient often prefer active treatment options. When something is actively being done, there may be no time for consideration or discussion, and there is no time to allow for grief. This unconscious unity may defend them from emotions as, for example, they both want to quickly

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“forget” failures (no pregnancy, miscarriage) and to proceed with medical treatment as soon as possible. The doctor should be aware of this problem with transference and countertransference [3].

Psychosocial infertility counseling can be recommended to both partners of the couple before, during, and after medical treatment [4]. While information gathering and analysis as well as implications and decision-making counseling can be provided by the medical doctor (and partly by other fertility staff), support and crisis counseling will usually be offered by a specially trained psychosocial counselor [5]. Major contents and aims of this counseling should be the discussion of the perceived stress of the medical treatment and the coping abilities of the couple, their social support, the estimations of treatment success, and the development of a treatment plan (including a “plan B” if treatment should finally fail) [6].

Couples should be given the information that meaning-based and active-confronting coping strategies are usually more helpful than active- or passive-avoidance strategies [4]. According to Schmidt [7], *meaning-based coping* is characterized by a positive reappraisal of the situation, by goal-directed, problem-focused coping, making use of spiritual beliefs and practices, and the attempt to infuse ordinary events with a positive meaning. *Active-confronting strategies* include asking other people for advice, talking to other people about emotions related to infertility and about experiences with the medical treatment, to let feelings out, and use humor. *Active-avoidance strategies* encompass avoiding being with children or pregnant women, leaving when people talk about pregnancies and children, and trying to keep feelings private. The fourth coping strategy, *passive-avoidance coping*, is characterized by hoping for a miracle, feeling that the only thing to do is to wait, and avoid reading or hearing about childlessness.

14.2 Definition in Lay Terms

Coping is derived from “to cope with” and refers to the way people deal with stressful situations. The process starts with an event that is primarily appraised by the individual as either *threatening, harmful, or challenging* [1].

14.3 Didactic Goals

After reading this chapter you should know:

- About the relationship between “psychogenic,” behavior-related, and somatic factors in infertility
- About the emotional impact of infertility on both partners of the couple
- Which coping strategies most couples use in this situation
- How to address these coping strategies adequately as an OB/GYN professional
- Some of the core elements in infertility counseling in order to improve coping of couples when needed

Case History

Karen (35 years old) and Michael (38 years old) Burgundy have been a couple for 7 years. For the last 2 years both of them have had an unfulfilled wish for a child. Six months ago Karen's hormone status was tested and showed to be normal. The resident gynecologist Andrew Tan counsels the couple to continue with timed intercourse. Two semen analyses within the last 3 months each have shown asthenozoospermia (i.e., semen with reduced sperm motility).

Michael has a stressful job as an investment banker. For a long time he has been smoking 2 packs of cigarettes a day. Unchallenged in her technical job at a television station, Karen does excessive mountain biking for 1 h daily (on weekends even longer). Her body appears slim and sinewy, whereas Michael seems to be rather lacking in power and drive. Over the course of time, most of their friends have become parents and meetings with them have become rare. The couple does not have a "plan B" and still hopes to get pregnant spontaneously. Due to the "unnaturalness" of the procedure, they reject in vitro fertilization. The couple does not agree upon the frequency of intercourse. In Karen's opinion they always complied with the "fertile window" during the last 6 months. To Michael, their chances were at a maximum of 50% of the possible opportunities.

Diagnostics

Andrew Tan is checking several medical issues: first he checks whether Karen still has regular ovulations, since she might have cycle abnormalities due to her excessive sports. Therefore Andrew monitors the cycle duration, followed by tests of LH and of progesterone in the second half of the menstrual cycle when indicated. The second step is the examination of the permeability of the fallopian tubes. Next to the medical investigations, Andrew asks about several other aspects, focusing on the coping strategies of the couple: "Do sports and smoking have the function of 'stress relief' for you? Have you both become socially isolated? How do you talk about your wish for a child with each other and other people? How is your current sex life?"

Therapeutics

Andrew Tan considers that there is a diagnosis of "behavior-related infertility" due to Karen's excessive sporting and Michael's smoking behavior. This implies that she needs to be urged to reduce her mountain biking activities and he needs to stop (or reduce) smoking [4].

Karen is astonished to hear from Andrew that her sporting behavior would no longer be labeled a healthy lifestyle but a behavior detrimental for her fertility. She agrees with Andrew's suggestion to reduce the mountain biking to 1 h every 2 days. Michael admits that he knew about the negative impact of cigarette smoking on his sperms already but that he has not found any other way of stress relief yet. Andrew provides advice where and how to learn relaxation techniques and asks if Michael could imagine practicing regular but moderate

sporting to reduce his stress. He explains to the couple that social isolation has been shown to be a prominent risk factor in terms of maladaptation to the experience of infertility. Surely, several of their friends would be glad to talk about other issues than napkins and teething. Andrew also suggests to be more open concerning the wish for a child and not to use any white lies [6].

Regarding their sex life, Andrew recommends Karen and Michael make a distinction between target-oriented and pleasure-oriented sexuality and not to make life difficult for themselves by expecting “sex by the clock” to be “spontaneous,” romantic, and fulfilling at the same time [8].

The couple’s passive-avoiding coping behavior is discussed both in a supportive as well as in a critical way during the medical consultation. First Andrew summarizes their past coping strategies as being sporty for Karen and “wait and see” for Michael. Andrew then continues with depicting both strategies as “effective until now.” He says, “You both are successful in your career, personal functioning, etc.” Then Andrew points out to Karen and Michael that clinical experience has shown clearly that unfortunately, both coping styles are very ineffective for infertile couples after some years of trying to get pregnant without success. Therefore they are informed about the positive effects of meaning-based coping strategies (“accept and give a positive meaning to childlessness”), and, in their case, especially active-confronting coping strategies (“engage in an active search for alternatives and do not cut yourselves off socially”) together as a couple. In this way, a helpful approach is to stimulate patients to prepare roadmaps and to adjust them during the course of infertility treatment. This definitely also means developing a “plan B,” a “plan C,” etc., starting from the beginning [6].

Therefore Andrew asks the question “What would your life look like in 5 years, provided you remain still childless?” Karen replies that she cannot imagine this situation right now and starts crying. Empathically Andrew agrees that this vision of childlessness may be emotionally threatening to imagine but that this issue should not become a taboo subject for Karen and Michael.

Couples should be reassured that the emotional long-term consequences of involuntary childlessness are not severe as long as the couple will accept this situation and is socially not isolated [4]. Andrew underlines that most couples report that in the medium and long term, coping with the crisis that childlessness represents leads to a strengthening of the partnership [9], and Michael agrees with that because this would be exactly his answer to Andrew’s last question of his vision for their future as a couple.

In case of the differential diagnosis “unexplained infertility,” Andrew outlines that the next treatment steps—after a specific period of “timed intercourse”—would be intrauterine insemination and eventually in vitro fertilization [10]. He asks what does the couple actually exactly know about assisted reproductive technologies (ART), what kind of misgivings and expectations do Karen and Michael have toward in vitro fertilization, and which

prejudices? Andrew explains that except from 2 to 5 days, where oocytes and semen are cultivated in the petri dish, pregnancies after in vitro fertilization are identical with naturally conceived pregnancies. Only the injection of a single sperm into an oocyte via micromanipulation during intracytoplasmic sperm injection is an artificial procedure. Worldwide, more than 5 million children were born after assisted reproduction, and their development is unremarkable and without pathological findings if the children are singletons, only (high-order) multiples may have an unfavorable prognosis. Concerning the couple's objection to the "unnaturalness" of in vitro fertilization, Andrew explains in detail the process step by step and refers Karen and Michael to information leaflets and up-to-date guidebooks.

14.4 Facts and Figures: Definitions, Classification, and Prevalence

14.4.1 How Many People Suffer from Infertility?

According to the World Health Organization (WHO) definition, involuntary childlessness is defined as not becoming pregnant after 1 year with unprotected sexual intercourse [11]. Since female fertility declines from 25 to 30 years on (and sharply in the late 30s), the age of the women is the most important factor contributing to infertility [12]. In Western countries, more and more women postpone motherhood to a later age, and therefore the prevalence of infertility is rising [13]. Although on average about 1 in 3–4 women waits for a pregnancy up to 1 year, only about 3–9% of couples are infertile and will presumably need medical help to become pregnant [14].

14.4.2 What Do You Think Are the Success Rates of Infertility Treatment?

After three cycles of assisted reproductive treatment, about half of these couples will have a live birth, and after six cycles—if the couple does not opt out of treatment—nearly 70% succeed with a live-born child/children [15, 16].

14.4.3 Who Suffers Emotionally More from Infertility: Women or Men?

Infertility is emotionally upsetting for most of the individuals affected [17], and the emotional impact on women and men is very similar [18]. Several typical aspects will be affected through the experience of infertility: emotions such as anxiety,

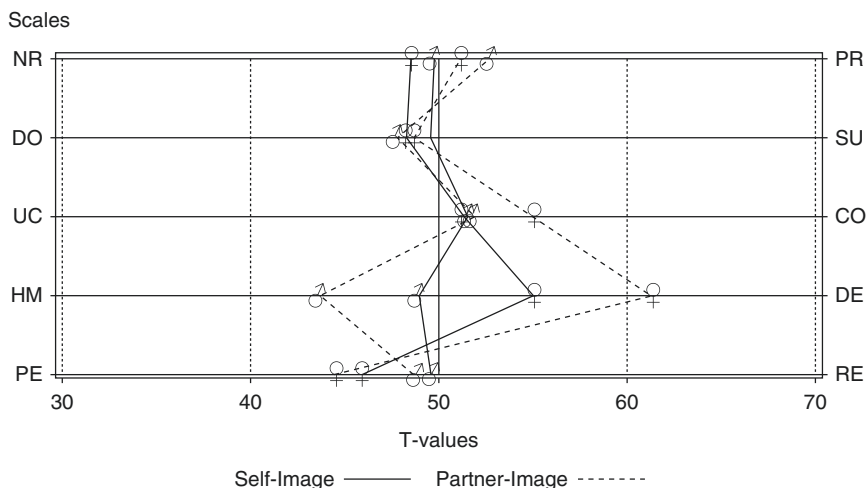
grief, helplessness, and feelings of guilt are common in both partners. Self-esteem is negatively affected, and since family building is often still seen as a “woman’s issue,” a decrease in self-esteem and a sense of failure is usually more prominent in the female partner. The partnership is impaired either in a positive way (the infertility crisis “welds” the couples together) or in a negative way (if the partner is blamed for his/her infertility diagnosis). The couple has to be prepared that during medical diagnostics and/or treatment up to 60% of the couples experience sexual problems [8]. These sexual problems are transitory in general, and only in very few cases will sexual therapy be necessary. At least the social surroundings might be negatively affected. As Wischmann and coworkers point out [19], social pressure can lead to a defensive approach so that neither friends nor parents are informed of the wish for a child or about the medical infertility treatment the couple is undergoing.

As described by Wischmann and Thorn [18], psychosomatic research postulated for decades that women suffer considerably more from infertility than their male partners. Recent research suggests, however, that these differences in men’s and women’s psychological responses to infertility can be interpreted as broader gender differences in reactions to stress, emotional distress, and grief rather than reactions specific to infertility. The results of much of the formerly available research may reflect differences in the ways men and women have been socialized to cope with negative affect and with distress and that by adhering to masculinity “norms,” many men tend to suppress their emotions in an effort to support their partners [18]. As Meyers and colleagues stated, the conflicts generated by infertility may lead to increased polarization and/or protective silence [20]. Figure 14.1 [21] shows the typical polarization that can be found in infertile couples’ relationship patterns.

On the basic mood scale, the self-assessments of men and women are very close together, whereas the partner images are positioned toward the carefreeness pole of the scale for the men (as seen by the women) and toward the depressive pole for the women (as seen by the men). As Van den Broeck and colleagues [6] point out, it can be helpful to visualize this polarization pattern (or “role allocation”) [19] in couples counseling to normalize its occurrence and to “allow” more flexibility in the allocation of roles. Otherwise the woman may want to talk about her pain and sadness, whereas her partner may feel helpless and withdrawn, resulting in polarization and isolation of both partners at a time where both partners need each other most in their infertility crisis.

14.4.4 What Do You Think Are the Most Helpful Coping Strategies for Infertile Couples?

As Peterson and coworkers could show [22], the coping strategies of both partners in infertile couples are interdependent and do interact. In their study, a partner’s use of active-avoidance coping was related to the increased personal, marital, and social distress for both partners. A woman’s use of active-confronting coping was related to increased male marital distress, and a partner’s use of meaning-based coping was



NR = negative response DO = dominant UC = uncontrolled HM = hypomanic PE = permeable
 PR = Positive response SU = submissive CO = compulsive DE = depressive RE = retentive
(Social response) (Dominance) (Self control) (Basic mood) (Permeability)

Fig. 14.1 Giessen test profiles of all couples. Typical polarization that can be found in infertile couples' relationship patterns. Self and partner images ($n=500$) (Used with permission of Oxford University Press from Wischmann et al. [21])

associated with decreased marital distress in men and increased social distress in women. The authors concluded that physicians and mental health providers can use the findings from this study to educate their patients regarding the benefits of meaning-based coping for women and their partners, as well as the gender differences that exist when men engage in meaning-based coping. For the authors it is likely that these differences in the effects of meaning-based coping for men and women are reflective of different gender perspectives on the importance of parenthood.

14.5 Etiology and Pathogenesis

Causes for infertility are nearly equally distributed among women and men: about one-third solely female factor infertility, about one-third solely male factor infertility, about one-third mixed factor infertility, and about 10% unexplained infertility. In about 9% of diagnoses, behavior-related infertility causes are prominent (e.g., severe underweight or overweight, drug intake, excessive cigarette smoking, nonorganically caused sexual dysfunctions) [23]. There is no empirical evidence for solely "psychogenic" infertility (emotional stress and intrapsychic blockades acting as the only powerful "conception stoppers") [24], for increased psychopathology in couples with unexplained infertility or for any infertility-specific couple relationship patterns [21].

14.6 Specific Diagnostic Aspects

As Wischmann et al. point out [19], it is necessary to consider both unconscious areas of the wish for a child (e.g., fantasies and dreams) and the consciously expressed motives and expectations of the couples. After years of infertility treatment, ambivalent feelings linked to the wish for a child or the medical treatment may barely be perceived by the couple as a consequence of their coping attempts. Often these ambivalences are split up in the couple, which means that one partner represents the “pro” side and the other the “con” (e.g., pro/con child, pro/con gamete donation, pro/con adoption, or pro/con termination of treatment). The doctor can see him-/herself as an “advocate of feelings,” including those feelings that the couple has been fending off. This can lead to the couple’s greater critical distance in connection with the child wish or the medical treatment offered. The motivation of the desire for a child should not be questioned, but rather the pressure that the couples feel they are under. The doctor may assist in developing new vistas (including a “plan B” if treatment should finally fail) [4, 6, 7].

Furthermore, processes of transference and countertransference should be kept in mind: In analyzing his/her countertransference, the doctor should keep clear his/her own opinion and ethical attitude toward the desire for a child, reproductive medicine, and treatment boundaries. The doctor’s own experiences with the wish for a child (unfulfilled in general or in the actual partnership) and especially his/her attitude to reproductive medicine techniques that are not legal in the country (but abroad) can negatively influence the doctor-patient relationship. It is also crucial to watch out for partiality in favor of one or the other partner in order to be aware of gender-specific countertransference tendencies: The doctor should be aligned with both couple members, counseling should be neutral, open, and without preposition.

Usually the doctor needs to ask more detailed questions about the couple’s sexuality. This involves inquiring whether coitus is always possible, whether intravaginal ejaculation occurs, and whether the couple experiences any sexual problems. Is the couple well informed about the “fertile window” and about the optimal time of sexual intercourse for enhancing conception chances? Not all couples know that the optimal time for sexual intercourse to conceive a child is 1–2 days *before* ovulation occurs [25].

14.6.1 How Can You Detect Which Coping Strategies Are Used by the Couple?

To identify patients at risk, questionnaires can be used (e.g., SCREENIVF [26] or the COMPI Coping Strategy Scales) or the doctor must ask the specific questions (based on [7]) about the favored coping style of each partner: “Do you turn to work or substitute activity to take your mind off things?” (active-avoidance coping), “Do you talk to someone about your emotions as childless?” (active-confronting coping), “Do you try to forget everything about your childlessness?” (passive-avoiding

coping), or “Do you believe there is a meaning in your difficulties with having children?” (meaning-based coping).

Other specific diagnostic issues can be found in references [3, 6, 19, 27]. Boivin [28] specified the following risk factors for persons who are likely to need intensive counseling: psychopathology (e.g., personality disorder, depression), primary infertility, being a woman, viewing parenting as a central adult life goal, general use of avoidant strategies, poor marital relationship, impoverished social network, situations or people that remind the person of their infertility (e.g., family reunions, pregnant woman), side effects of the medical treatment associated with medication (e.g., mood fluctuation), situations that threaten the goal of pregnancy (e.g., miscarriage, treatment failure) and decision-making times (e.g., start and end of treatment, fetal reduction). In these cases, specific infertility counseling of the couple by a mental health professional or by a psychotherapist might be indispensable [5].

14.7 Specific Therapeutic Aspects

14.7.1 What Kind of Counseling Types Can Be Found in Infertility Counseling?

As shown in the case history, it can be helpful to advise a couple to distinguish between “sex for baby making” and “sex for fun.” This means that on fertile days a more target-oriented approach to sexuality is on the agenda, whereas at other times, desire and/or romantic affection are the determining factors in sexual encounters [8].

Learning of relaxation techniques can be recommended and will facilitate successful coping (but will not improve pregnancy rates in the majority of cases) [29].

As Van den Broeck and coworkers point out, the majority of patients tend to be in a passive position of “wait and see and let the doctor act” during infertility treatment. Therefore it is important to empower them to actively join in the decisions regarding their infertility problems (see Case [History](#)). This includes helping to explore possible alternatives to biological parenthood and boundaries of ART treatment [6].

14.8 Critical Reflection and Conclusive Remarks

Because of the sensible and intimate nature of fertility consultation, a stable and empathic-based doctor-patient relationship is very important for successful diagnosis and treatment, especially when discussing the “plan B.” This relationship can only partly be substituted by reading medical guidebooks or Internet use [29]. The experience of infertility is often experienced as a life crisis by these couples. The emotional impact of this experience can be as strong as suffering from severe illness or the loss of a close relative. As health care professionals we can learn from these couples that nearly every life crisis can be conquered with adequate coping

strategies and with an open and respectful couple communication behavior. Infertile couples should have the opportunity to easily uptake psychological infertility counseling at any stage of the medical treatment process (and also independent of treatment), but the counseling should not be mandatory. The majority of these couples can cope with this situation without the help of a mental health professional. As there is no guarantee for a live-born child after medical infertility treatment, the discussion of a “plan B” should not become a taboo in the doctor-patient relationship.

Tips and Tricks

In counseling it is important for the health care professional:

- To consider both unconscious areas of the wish for a child (e.g., fantasies and dreams) and the consciously expressed motives and expectations of the couples.
- To be aware of processes of transference and countertransference: In analyzing his or her countertransference, the health care professional should keep clear his or her own opinion and ethical attitude toward the desire for a child, reproductive medicine, and treatment boundaries.
- To watch out for partiality in favor of one or the other partner in order to be aware of gender-specific countertransference tendencies: The doctor should be aligned with both couple members, counseling should be neutral, open, and without preposition.
- To ask detailed questions about the couple’s sexuality.
- In cases with risk factor (see earlier section on *How Can You Detect Which Coping Strategies Are Used by the Couple?*), specific infertility counseling of the couple by a mental health professional or by a psychotherapist might be indispensable.
- It can be helpful to advise a couple to distinguish between “sex for baby making” and “sex for fun.”

Test Your Knowledge and Comprehension

1. In Western countries, the age of the woman giving birth to her first child inclines over the last 10 years.
 - (a) True
 - (b) False
2. Women always suffer emotionally more from infertility than their male partners.
 - (a) True
 - (b) False
3. Using online infertility boards or chat rooms is always an adequate substitute for the face-to-face patient-doctor relationship.
 - (a) True
 - (b) False

4. The majority of infertile couples suffer from temporary sexual dysfunctions during fertility workup or during reproductive medicine treatment.
 - (a) True
 - (b) False
5. Cigarette smoking does not affect one's fertility negatively.
 - (a) True
 - (b) False
6. A 1-year waiting time for a pregnancy once in a lifetime might occur in
 - (a) No woman with a desire for a child
 - (b) Every tenth woman with a desire for a child
 - (c) Every third to fourth woman with a desire for a child
 - (d) Every woman with a desire for a child
7. Behavior-related infertility occurs in about ... of infertile couples:
 - (a) 1%
 - (b) 10%
 - (c) 50%
 - (d) 100%
8. After having been counseled on timed intercourse, the female patient ashamedly reports her partner was not able "to do it." What is the doctor's most favorable reaction?
 - (a) He or she ignores the patient's information and continues with his routine tasks.
 - (b) He or she strongly advises her partner to seek psychiatric consultation.
 - (c) He or she points out that during infertility treatment many couples may experience temporarily sexual problems and thus gives relief to the patient.
 - (d) He or she terminates infertility treatment because the male partner obviously lacks a serious wish for a child.
9. A primary aim of psychosomatic-oriented infertility counseling should be
 - (a) Ignoring infertility-related emotions of the couple
 - (b) Helping the couple to find a "plan B"
 - (c) Consequently advise not to undergo assisted reproductive treatment
 - (d) Solely to explore the "intrapsychic blockades" against getting pregnant
10. Infertility and long-term mental health: Involuntarily childless couples...
 - (a) Are usually suicidal
 - (b) Have a good prognosis as long as they accept their situation
 - (c) Have a bad prognosis if they are socially well integrated
 - (d) Always experience a significantly worse life quality compared to parenting couples

Answers

1. True
2. False
3. False
4. True

5. False
6. (c)
7. (b)
8. (c)
9. (b)
10. (b)

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