Association of Reproductive Health Professionals

FEMALE SEXUAL RESPONSE

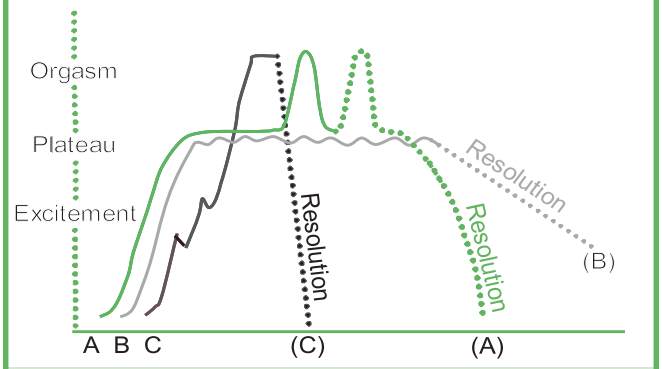
What You Need to Know

Sex permeates societies throughout the world, especially in the United States. However, many health care providers are not effective at speaking with their patients about sexuality and sexual health, particularly midlife women. The success of treating erectile dysfunction (ED) in men has driven a dramatic interest in understanding female sexual problems, and a variety of treatments are now available and in development. However, in trying to understand and treat women who may be experiencing sexual distress, questions have naturally arisen about the differences between male and female sexual response. A brief history of the evolving understanding of female sexual response helps answer these questions.

Linear Model

In 1966, Masters and Johnson published their groundbreaking book, *Human Sexual Response*.[1] They proposed a linear model of sexual response for both men and women composed of four stages, beginning with excitement/arousal and proceeding to plateau, orgasm, and resolution (see **Figure 1**). In 1979, Kaplan added the concept of desire to the model and condensed the response into three phases: desire, arousal, and orgasm.[2,3] Over the past decade, this framework has been called into question for women for a number of reasons:

FIGURE 1. Female Sexual Response Model Developed by Masters and Johnson[1]



This model reflects the different responses different women may have or an individual woman may have on different occasions. For instance, Woman A has a smooth transition from excitement to plateau to orgasm to resolution and has multiple orgasms on this occasion. Woman B (or Woman A on a different occasion) has a smooth transition up to plateau but doesn't experience an orgasm. This is not a problem if it is an occasional occurrence (e.g., it is Woman A, who sometimes experiences orgasm) but would be diagnosed as a sexual disorder if this occurs every time Woman B has a sexual experience. Woman C has a different pattern of transition from excitement through orgasm and resolution than either A or B—again possibly reflecting the same woman on another occasion or three different women.

1. It assumes that men and women have similar sexual responses, and in so doing may pathologize normal behavior in women.[4,5]
2. Many women do not move progressively and sequentially through the phases as described. According to sex educator and researcher Beverly Whipple, PhD, RN, FAAN, professor emerita at Rutgers University, women may not even experience all of the phases—for example, they may move from sexual arousal to orgasm and satisfaction without experiencing sexual desire, or they can experience desire, arousal, and satisfaction but not orgasm.[5] This thinking was alluded to by Masters and Johnson and is echoed by Rosemary Basson, MB, FRCP, of the University of British Columbia, who posits that much of female sexual desire is actually responsive rather than spontaneous—for instance, a reaction to a partner's sexual interest rather than a spontaneous stirring of her own libido.[6]
3. As a largely biologic model, the Masters and Johnson and Kaplan framework has been criticized because it does not take into account non-biologic experiences such as pleasure and satisfaction[7] or place sexuality in the context of the relationship.[4]

Circular Model

In 1997, armed with the recognition that not all women conform to the linear model of sexual response, Whipple and Brash-McGreer proposed a circular sexual response pattern for women.[7] This concept is built on the Reed model, which comprises four stages (see **Figure 2**): Seduction (encompassing desire), sensations (excitement and plateau), surrender (orgasm), and reflection (resolution). By making Reed's model circular, Whipple and Brash-McGreer demonstrate that pleasant and satisfying sexual experiences may have a reinforcing effect on a woman, leading to the seduction phase of the next sexual

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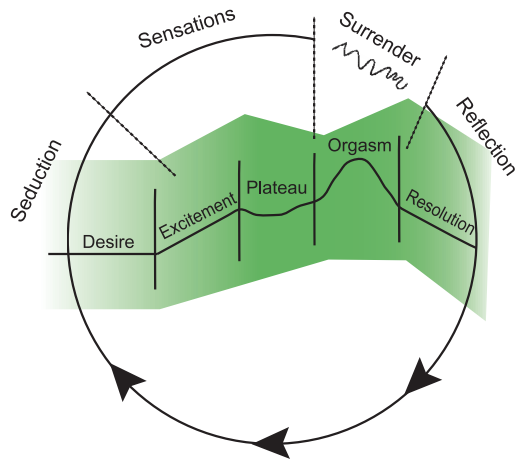
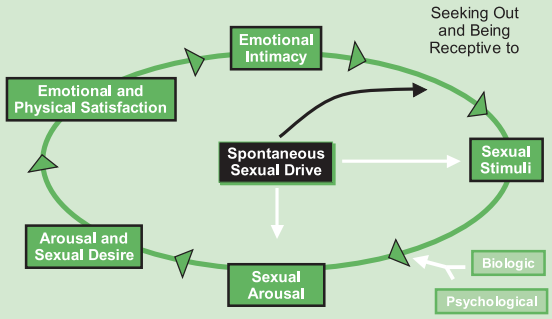
FIGURE 2. Circular Model of Female Sexual Response Developed by Whipple and Brash-McGreer[5]



Whipple and Brash-McGreer's circular model of female sexual response shows how pleasure and satisfaction during one sexual experience can lead to the seduction phase of the next sexual experience.

FIGURE 3. Non-linear Model of Female Sexual Response Developed by Basson[6]



Basson's non-linear model acknowledges how emotional intimacy, sexual stimuli, and relationship satisfaction affect female sexual response.

experience. If, during reflection, the sexual experience did not provide pleasure and satisfaction, the woman may not have a desire to repeat the experience.

Non-linear Model

Basson has also constructed a new model of female sexual response that incorporates the importance of emotional intimacy, sexual stimuli, and relationship satisfaction (see **Figure 3**).[6] This model acknowledges that female sexual functioning proceeds in a more complex and circuitous manner than male sexual functioning and that female functioning is dramatically and significantly affected by numerous psychosocial issues (e.g., satisfaction with the relationship, self-image, previous negative sexual experiences).

According to Basson, women have many reasons for engaging in sexual activity other than sexual hunger or drive, as the traditional model suggests. Although many women may experience spontaneous desire and interest while in the throes of a new sexual relationship or after a long separation from a partner, most women in long-term relationships do not frequently think of sex or experience spontaneous hunger for sexual activity. In these latter cases, Basson suggests that a desire for increased emotional closeness and intimacy or overtures from a partner may predispose a woman to participate in sexual activity. From this point of sexual neutrality—where a woman is receptive to being sexual but does not initiate sexual activity—the desire for intimacy prompts her to seek ways to become sexually aroused via conversation, music, reading or viewing erotic materials, or direct stimulation. Once she is aroused, sexual desire emerges and motivates her to continue the activity. On the road to satisfaction, there are many points of vulnerability that may derail or distract a woman from feeling sexually fulfilled. The Basson model clarifies that the goal of sexual activity for women is not necessarily orgasm but rather personal satisfaction, which can manifest as physical satisfaction (orgasm) and/or emotional satisfaction (a feeling of intimacy and connection with a partner).[6,8]

Updated July 2005

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2. Kaplan HS. *Disorders of Sexual Desire and Other New Concepts and Techniques in Sex Therapy*. New York, NY: Brunner/Hazel Publications; 1979.
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5. Whipple B. Women's sexual pleasure and satisfaction. A new view of female sexual function. *The Female Patient* 2002;27:39-44.
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8. Walton B, Thorton T. Female sexual dysfunction. *Curr Wom Health Rep* 2003;3:319-326.

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