

The Women's Health Research Program

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Talking Sex

Our understanding of the female sexual experience is constantly evolving, as we acquire new knowledge of the way in which the body works. In 1966, Masters and Johnson first proposed a model of sexual function for both men and women that consisted of 4 stages including "excitement" (arousal) with subjective feelings of sexual pleasure accompanied by psychological and genital changes, "plateau" with maximal stage of arousal and muscular tension, "orgasm" with the peak of sexual pleasure and rhythmic contractions of the genital musculature and "resolution" with a general state of relaxation and well-being. By the mid-1970s, Kaplan modified the model proposed by Masters and Johnson and characterised the female sexual response cycle as a 3 phase model composed of "desire", "arousal" and "orgasm". The sexual response model continues to be revised and new models are tested.

Biological factors, including brain chemicals, are integral parts of sexual function and a balance between excitatory brain activity and inhibitory activity may be necessary for a healthy sexual response. Sex hormones (oestrogens, androgens and progesterone) also modify a woman's motivation for or against sexual activity. The role of testosterone is best understood; it plays a crucial role in sexual desire, arousal and receptivity towards sexual stimulation, and possibly orgasm.



The most commonly reported sexual problems in women relate to sexual desire and interest, pleasure, and global satisfaction. Inability to achieve orgasm is also a common problem amongst women. Sexual problems are most common for women aged 45–64 years (14.8 per cent), lowest for women 65 years or older (8.9 per cent), and intermediate in women aged 18–44 years (10.8 per cent).

Factors associated with the development of sexual dysfunction in women include physiological factors (injury, surgery, hormonal disease), psychological disorders (depression, anxiety), and medications (antidepressants, anti-androgens and the oral contraceptive pill). Sexual problems have also been found to be more common in women who are middle aged, married,

not partnered, less educated and postmenopausal women especially surgically postmenopausal women. Other factors that have not been well researched but may underpin sexual difficulties include diabetes, cardiovascular disease and major chronic physical illnesses, as well as chemotherapy and pelvic radiotherapy.

How can women be helped?

Women experiencing sexual function difficulties should speak to their doctor about their problem. The first step is to identify factors contributing to the problem including relationship issues, personal circumstances, concurrent illness, medications or partner health issues. Initial management may include counselling, sensate focus, cognitive behavioural therapy and couple therapy. Counselling can address issues such as



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poor emotional intimacy and domestic distractions (children, work, etc) and strategies to create a more positive sexual context. Individual cognitive therapy, which focuses on individual's thoughts, feelings and behaviour, helps women to be more aware of irrational beliefs, and dysfunctional thoughts and, in doing so, may help women modify their thinking and approach. The aim of couple therapy is to enhance communication skills between couple, and reduce stress and conflict within the relationship.

Medical therapy for female sexual dysfunction

Oestrogen levels drop precipitously at menopause and this results in thinning of the vaginal wall, loss of vaginal tone and painful sex. These symptoms are best treated with local oestrogen therapy as either oestrogen cream or pessaries used twice weekly long term.

For women experiencing loss of sexual desire and diminished arousal, testosterone therapy may be of benefit.

Whereas oestrogen levels fall at menopause, testosterone levels decline in women steadily with increasing age. Thus by the time women reach their forties their testosterone level may be as low as half of what it was in their late teens-twenties. Several studies have now shown that treatment of women with 'female' doses of testosterone, which restore blood levels into the range of young women, improves sexual

desire, arousal, orgasm and overall pleasure. Many women are successfully treated with low dose testosterone therapy.

A nonhormonal therapy, called flibanserin, has also been shown to improve sexual desire in premenopausal and postmenopausal women.

Flibanserin has not yet been approved for use by regulators, although this may be forthcoming. Testosterone or flibanserin are not elixirs of sexual youth, but both can have a meaningful impact on a woman's sexual interest and equally importantly sexual responsiveness to her partner's interest.

Phosphodiesterase type 5 inhibitors such as sildenafil (Viagra®) may be of value to women with sexual arousal disorder, but in general these compounds do not benefit the majority of women with sexual dysfunction.

A new approach to treating women who do not experience orgasm

Most recently a novel approach has been developed to potentially treat women who fail to reach orgasm (anorgasmia). Researchers recognised that testosterone therapy not only improved sexual desire, but also resulted in increased vaginal blood flow and increased orgasm frequency. As a result the approach of using testosterone on an "as needs" basis is being studied in centres across Australia and North America, including the Women's Health Research Program.

Get involved in research

Our new study will assess whether the self-administration of a single dose of testosterone as an intra-nasal gel will result in ability to reach orgasm for women who have previously experienced orgasm but no longer do so.

To participate in this study women need to be over 18 years of age and premenopausal, be experiencing inability to reach orgasm, but have experienced orgasm in the past and be in a stable sexual relationship of at least six months duration.

Recruitment will begin shortly and if you would like to register your interest in participating in this study please email womens.health@monash.edu or call 03 9903 0820 and leave your contact details.