

# Low libido in women

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**Women presenting for advice about sexual concerns most commonly report lowered libido. A useful approach to this complex problem includes assessing the woman's relationship, general, psychological and gynaecological health, medication use, reproductive state and psychological stressors.**

Female sexual dysfunction is common, with estimates of prevalence ranging from 8 to 50%;<sup>1-3</sup> however, the very existence of female sexual dysfunction has been questioned, with the implication that it is a fabricated entity driven by pharmaceutical companies' desire to profit from offering new products to a novel target audience.<sup>4,5</sup>

Nevertheless, while this debate about female sexual dysfunction continues, a subset of women will present to their medical practitioner, usually their GP, for advice about sexual concerns, with the most commonly reported problem being lowered libido. In this context, having an approach to female patients who present with lowered libido is a useful aid to making a diagnosis and discussing management options with them. This article outlines an approach to the assessment and management of women who present with problematic low libido.



## Lowered libido

Disorders of female sexual desire and arousal have been combined in the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition; however, most published studies of female sexual dysfunction have reported that lowered libido is the most prevalent problem, regardless of study population or age group.<sup>6</sup> In a recent large telephone interview study of women in Australia aged between 20 and 64 years, over two-thirds of participants reported at least one sexual problem, and 50% of these reported lowered libido.<sup>7</sup>

Libido is the result of a complex interplay of psychological, anatomical and physiological factors. A unique component in women is the cyclical sex steroid hormone fluctuations throughout their reproductive life, followed by a vastly different hormonal array in the untreated postmenopausal state. Low libido is commonly reported after menopause, and the prevalence of low libido increases with age; however, the key element of lowered libido in the definition of female sexual dysfunction is that it is causing the woman distress. Libido and sexual function generally decrease with age,<sup>8</sup> yet the degree of distress associated with this is higher among premenopausal than postmenopausal women.<sup>9</sup> Other factors that can affect libido in women include relationship length, coexisting physical or mental health problems, gynaecological history, medication use, partner health, education level and psychosocial stressors.<sup>10</sup>

## Assessing the patient and managing care

Managing the care of a woman with low libido will depend on the initial assessment of the likely cause or contributing factors (Box). If relationship issues predominate, psychosexual counselling may be useful. General health issues such as thyroid dysfunction or iron deficiency need further investigation and appropriate management. Treatment of anxiety and depression will aid libido in some women; however, if this involves using a selective serotonin reuptake inhibitor (SSRI), mood may improve but lowered libido may remain problematic.

Vaginal dryness can be treated with commercially available vaginal moisturisers or vaginal oestrogen. If the woman is postmenopausal and has other oestradiol deficiency symptoms such as vasomotor symptoms or sleep disturbance, systemic menopausal hormone therapy should be effective for these symptoms as well as vaginal dryness.

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## AN APPROACH TO ASSESSING WOMEN WHO PRESENT WITH LOWERED LIBIDO

### Relationship

Key areas to ask the patient about include the quality of her relationship, whether her lowered libido distresses her or her partner, and whether her lowered libido causes strain within the relationship.

### General health

It is important to exclude pathological causes of lowered libido, such as thyroid dysfunction, anaemia and iron deficiency.

### Psychological health

Anxiety and depression are common causes of lowered libido and need to be excluded in the workup for lowered libido. Other causes may include post-traumatic stress disorder, including past sexual abuse.

### Gynaecological health

Ask the patient about vaginal dryness, dyspareunia, past endometriosis, uterine fibroids and previous traumatic births.

### Medication use

Many medications can have a negative impact on libido, including commonly prescribed medications such as the combined oral contraceptive pill and the selective serotonin reuptake inhibitor (SSRI) and serotonin and noradrenaline reuptake inhibitor (SNRI) groups of antidepressants.

### Reproductive state (pre-, peri- or postmenopausal)

Fluctuating oestradiol levels in perimenopause and permanently low levels after menopause can both adversely affect libido.

### Psychological stressors

Stress related to work, family, financial difficulties and the care of dependents can all adversely affect libido.

The combined oral contraceptive pill may assist libido by removing the risk of pregnancy, but a common side effect is lowered sexual desire. This may be associated with the pill greatly reducing levels of freely circulating androgens, including the midcycle surge in testosterone at around the time of ovulation.

Addressing psychological stressors is challenging, but psychology referral may be useful.

### Androgen therapy

Some women will seek treatment with androgens, including testosterone or dehydroepiandrosterone (DHEA), for lowered libido. This is a controversial area, but most studies of testosterone use in women report an improvement in libido.<sup>11-21</sup>

Most studies of testosterone use in women have been conducted in surgically postmenopausal women on menopausal hormone therapy. There is a large placebo effect of about 30%, and most studies report supraphysiological levels of testosterone

in women on treatment. Short-term side effects may include hirsutism, oily skin, acne and scalp-hair loss. Irreversible side effects include clitoromegaly and voice deepening. Comprehensive guidelines are available, and women need careful counselling and expert advice if off-label testosterone use is being considered.<sup>22,23</sup>

Few studies of testosterone use in premenopausal women have been conducted. Those who are at risk of pregnancy need to use failsafe contraception if considering testosterone use, as virilisation of a developing fetus may occur, leading to a need to terminate the pregnancy.

### Flibanserin

Flibanserin has been approved in the United States for treatment of hypoactive sexual desire disorder in premenopausal women. Flibanserin is an oral 5-hydroxytryptamine (5HT)<sub>1A</sub> receptor agonist and 5HT<sub>2A</sub> receptor antagonist, and a weak partial dopamine agonist.

Studies in the USA and Europe have reported an increase in the number of satisfying sexual events or increased desire in premenopausal women treated with flibanserin. Reported side effects have included nausea, dizziness, fatigue, somnolence and insomnia, and this medication is not available for use in Australia at the time of writing this article.<sup>24</sup>

### Conclusion

Lowered libido that causes the woman distress is the most commonly reported type of female sexual dysfunction. Many factors may contribute to lowered libido in women.

There is no one solution to the problem of low libido, and some women may need to be referred for sexual counselling or other specialist management. Further useful information is available for patients and health practitioners at <http://www.jeanhailes.org.au>, <http://www.med.monash.edu.au/sphpm/womenshealth> and <http://www.menopause.org.au>. **MT**

### References

A list of references is included in the website version of this article ([www.medicinetoday.com.au](http://www.medicinetoday.com.au)).

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## References

1. Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: prevalence and predictors. *JAMA* 1999; 281: 537-544.
2. Kontula O. Sexual pleasures. Enhancement of sex life in Finland, 1971-1992. Aldershot: Dartmouth; 1995.
3. Bejin A. Sexual pleasures, dysfunctions, fantasies and satisfaction. In: Spira A, Bajos N, ACSF Group. eds. *Sexual behaviour and AIDS*. Aldershot: Avebury; 1994. p. 163-171.
4. Moynihan R. The making of a disease: female sexual dysfunction. *BMJ* 2003; 326: 45-47.
5. Puppo V. Female sexual dysfunction is an artificial concept driven by commercial interests: FOR: FSD is a multimillion dollar business. *BJOG* 2015; 122: 1419.
6. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th ed. Arlington, VA: American Psychiatric Association; 2013.
7. Smith AM, Lyons A, Ferris JA, et al. Incidence and persistence/recurrence of women's sexual difficulties: findings from the Australian Longitudinal Study of Health and Relationships. *J Sex Marital Ther* 2012; 38: 378-393.
8. Dennerstein L, Alexander JL, Kotz K. The menopause and sexual functioning: a review of the population-based studies. *Annu Rev Sex Res* 2003; 14: 64-82.
9. Bancroft J, Loftus J, Long JS. Distress about sex: a national survey of women in heterosexual relationships. *Arch Sex Behav* 2003; 32: 193-208.
10. Mishra G, Kuh D. Sexual functioning throughout menopause: the perceptions of women in a British cohort. *Menopause* 2006; 13: 880-890.
11. Burger HG, Hailes J, Menelaus M, Nelson J, Hudson B, Balazs N. The management of persistent menopausal symptoms with oestradiol-testosterone implants: clinical, lipid and hormonal results. *Maturitas* 1984; 6: 351-358.
12. Sherwin BB, Gelfand MM, Brender W. Androgen enhances sexual motivation in females: a prospective, crossover study of sex steroid administration in the surgical menopause. *Psychosom Med* 1985; 47: 339-351.
13. Davis SR, McCloud P, Strauss BJ, Burger H. Testosterone enhances estradiol's effects on postmenopausal bone density and sexuality. *Maturitas* 1995; 21: 227-236.
14. Sarrel P, Dobay B, Wiita B. Estrogen and estrogen-androgen replacement in postmenopausal women dissatisfied with estrogen-only therapy. Sexual behavior and neuroendocrine responses. *J Reprod Med* 1998; 43: 847-856.
15. Shifren JL, Braunstein GD, Simon JA, et al. Transdermal testosterone treatment in women with impaired sexual function after oophorectomy. *N Engl J Med* 2000; 343: 682-688.
16. Dobs AS, Nguyen T, Pace C, Roberts CP. Differential effects of oral estrogen versus oral estrogen-androgen replacement therapy on body composition in postmenopausal women. *J Clin Endocrinol Metab* 2002; 87: 1509-1516.
17. Braunstein GD, Sundwall DA, Katz M, et al. Safety and efficacy of a testosterone patch for the treatment of hypoactive sexual desire disorder in surgically menopausal women: a randomized, placebo-controlled trial. *Arch Intern Med* 2005; 165: 1582-1589.
18. Buster JE, Kingsberg SA, Aguirre O, et al. Testosterone patch for low sexual desire in surgically menopausal women: a randomized trial. *Obstet Gynecol* 2005; 105 (5 Pt 1): 944-952.
19. Davis SR, van der Mooren MJ, van Lunsen RH. Efficacy and safety of a testosterone patch for the treatment of hypoactive sexual desire disorder in surgically menopausal women: a randomized, placebo-controlled trial. *Menopause* 2006; 13: 387-396.
20. Davis SR, Moreau M, Kroll R. Testosterone for low libido in postmenopausal women not taking estrogen. *N Engl J Med* 2008; 359: 2005-2017.
21. Panay N, Al-Azzawi F, Bouchard C, et al. Testosterone treatment of HSDD in naturally menopausal women: the ADORE study. *Climacteric* 2010; 13: 121-131.
22. North American Menopause Society. The role of testosterone therapy in postmenopausal women: position statement of The North American Menopause Society. *Menopause* 2005; 12: 496-511; quiz 649.
23. Wierman ME, Arlt W, Basson R, et al. Androgen therapy in women: a reappraisal: an Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab* 2014; 99: 3489-3510.
24. Jaspers L, Feys F, Bramer WM, Franco OH, Leusink P, Laan ETM. Efficacy and safety of flibanserin for the treatment of hypoactive sexual desire disorder in women: a systematic review and meta-analysis. *JAMA Intern Med* 2016; 176: 453-462.