



Hypoactive sexual desire disorder; The next target for drug development?

An increasing number of population based surveys have revealed high prevalence rates of disturbances in sexual functioning in women. The overall prevalence of having at least one such disturbance in the past year is reported to be in excess of 40%¹⁻³. Amongst the various disturbances, prevalence rates of self-reported low sexual desire are especially high^{2,3}. Not all women who, in epidemiological-type studies, report low sexual desire can be regarded as having a sexual dysfunction. The crucial criterion is whether it is problematic^{4,5}. The American Psychiatric Association, in their Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), use the term 'hypoactive sexual desire disorder' to describe problematic low or absent sexual desire for which the diagnostic criteria mandates both "marked distress or interpersonal difficulty"⁴. However, it has been recommended that the clause 'causing interpersonal difficulty' should no longer be used as a diagnostic criterion; only the woman's personal distress being important⁵. In a Swedish population study of women aged 18 to 74 years, 33% were found to have low sexual interest but of these, only 43% considered it a problem². The prevalence of problematic low sexual desire has been reported to be much higher in some clinical samples. For example, amongst women attending for routine gynaecological care from general practitioners and gynaecologists in North America 67% reported low sexual desire that was causing problems⁶.

The currently recommended definition for hypoactive sexual desire disorder, is "the persistent or recurrent deficiency (or absence) of sexual fantasies/thoughts, and/or desire for or receptivity to sexual activity, which causes personal distress"⁵. This is an improvement on the DSM-IV-TR definition⁴ because it reflects current

thinking on the nature of sexual desire in women^{7,8}. This definition highlights two main components; sexual drive (evidenced from sexual fantasies and thoughts) and sexual desire. It may be helpful to consider sexual drive as an index of the biological "appetite" for sexual activity which is omni-directional in that it can lead to any type of sexual outlet – sexual fantasies, masturbation, partner-related sexual activity, and sexual desire as being object-focused – for example, the desire to have sexual activity with a particular partner or in a particular manner⁹. This dichotomisation may become more important as pharmaceutical and endocrinological agents are introduced to treat hypoactive sexual desire. There is a clinical need for such agents, but their success in treating hypoactive sexual desire in clinical practice may well fall short of the efficacy demonstrated in clinical trials where the study populations are selected using criteria that may predispose to successful outcome and comprise women who are motivated and investigators who have time and experience to assess the subjects thoroughly. Of all female sexual problems, hypoactive sexual desire disorder is probably the most difficult to assess.

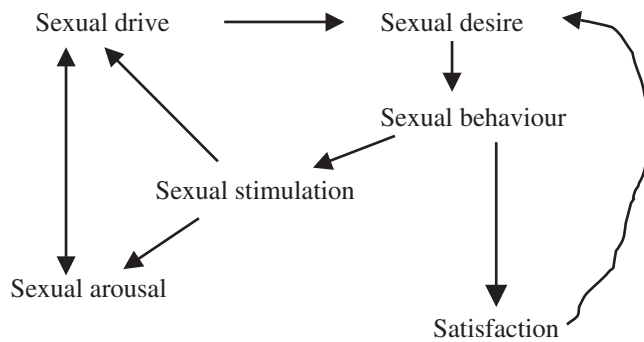
Not all women are naturally sexually proceptive. In other words, they lack spontaneous sexual drive. However, a woman, not sexually driven at the time, may agree to begin sexual activity with her partner for a number of reasons unrelated to sexual drive¹⁰. These may include enhancing intimacy, demonstrating commitment to and love for partner, bonding, wanting to be emotionally close and sharing pleasure. As a result of sexual stimulation derived from such activity she may become aroused and her awareness of sexual arousal may induce sexual desire and drive which encourages her to con-

tinue the sexual activity to resolve increasing sexual tension. This has been termed "responsive sexual desire"

If a woman in a relationship presents with loss of sexual desire (usually meaning she has little or no desire for sexual activity with her partner) but continues to experience sexual thoughts or can generate sexual fantasies or has other sexual outlet, such as masturbation to relieve sexual tension (not all masturbation is sexually driven) she has intact sexual drive and the reasons why she is unable to focus her sexual drive towards her partner need to be explored.

Some women presenting with hypoactive sexual desire are unable to initiate this intimacy – enhancing activity with their partner because of lack of attraction; they do not "fancy" their partner. Attractiveness is not merely related to physical state but also elements of behaviour, intellectual capability, worthiness, and perhaps chemical, although the role of pheromones in human sexual attraction still needs to be elucidated. Another reason for inability to initiate or participate in intimacy-enhancing activity, especially in a long term relationship is intimacy disorder. This is characterised by the person being able to enjoy sexual interaction with strangers but develops sexual avoidance when she or he becomes too emotionally involved with a partner¹¹.

When a woman, in a non-sexually driven state, begins sexual activity with her partner, she will become sexually aroused and hence develop sexual desire, only if she receives effective sexual stimulation, has intact arousal mechanisms and competently processes the clues indicative of sexual arousal. A recent focus group study has revealed that women describe a wide range of physical (genital and non-genital), cognitive, emotional and behaviour cues to sexual arousal¹². There is a



Drive, desire, arousal interaction

firm association between sexual arousal and sexual desire¹³ just as there is high co-morbidity between hypoactive sexual desire disorder and arousal disorder¹⁴.

Effective sexual stimulation can be considered as the algebraic sum of positive, sexually enhancing stimuli and negative, sexually inhibiting, stimuli⁹. Positive stimuli comprise both psychogenic (psychological stimulation) and reflexogenic (genital stimulation) elements. Basson points out that often the needed stimuli are related more to the behaviour of the partner during the day, than specifically at the moment of physical interplay⁸. Relationship conflict or partner behaviour that falls short of what the woman expects during the day will constitute negative stimuli in the effective stimulation formula proposed above and hence inhibit responsive sexual desire. The duration and nature of the psycho-physical interplay during foreplay is also important. In a study of women in non-distressed marriages the majority (65.3%) said they wanted more foreplay¹⁵.

Another important factor that operates in the focusing of sexual drive to sexual desire is 'sexual satisfaction'. Achieving sexual satisfaction from a sexual interaction acts as a re-inforcer that makes the person want to repeat the particular interaction. If the person derives little or no satisfaction from the sexual interaction there is no incentive to repeat it. A useful working definition of sexual satisfaction is 'how near what a person gets out of a particular sexual behaviour comes to what he or she had expected to get out of it'¹⁶. The

problem is that many people set their own criteria for sexual satisfaction at unrealistic and unattainable levels and hence have no reinforcement for their sexual desire.

The definition of hypoactive sexual desire includes both 'absence' and 'deficiency' of indices of sexual drive⁵. 'Deficiency' requires clinical judgement. The intensity of sexual drive follows a distribution, ranging from zero (no sexual drive) to extremely high levels, in women probably skewed to the lower. Neither end of this continuum can be considered abnormal, except, perhaps, where extremely high levels of sexual drive leads to disruption of everyday life. How then does a woman make a self-assessment of having low sexual desire? In general, the woman has a reference level of sexual desire against which she compares her ongoing desire. This may be real or imagined. Real reference may be how the woman judges her desire to be relative to some point in the past, eg before her pregnancy, before her marriage or before her menopause. For women in a relationship, a common reference point is the level of her partner's sexual desire. Convention is that where a discrepancy in sexual desire levels causes problem, the partner with the lower level is the "patient". Or women may compare their level of sexual desire with what they imagine to be the norm. Whatever reference the woman may use, it is essential that the clinician assesses it carefully taking in to account factors such as age, duration of relationship and partner's level of sexual desire.

Hypoactive sexual desire disorder is a difficult problem to assess and treat. It is a problem whose aetiology can rarely be traced solely to a biochemical or other organic abnormality. Whilst the development of drugs and hormonal products specifically designed to help patients with this problem is welcomed it is essential that clinicians gain a better understanding of the nature of sexual desire and the factors that influence it. Ideally, for best outcome such products should be used as an adjunct to sex and relationship therapy.

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REFERENCES

- 1 Dunn K, Croft P, Hackett G. Sexual problems: a study of the prevalence and need for health care in the general population. *Family Practice* 1998; 15(6): 519–24.
- 2 Sjogren Fugl-Meyer K, Fugl-Meyer A. Sexual disabilities are not singularities. *Int J Impot Res* 2002; 14: 487–93.
- 3 Lauman E, Paik A, Rosen R. Sexual dysfunction in the United States. *JAMA* 1999; 281: 537–44.
- 4 American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. Fourth Edition, Text Revision. American Psychiatric Association., Washington DC, 2000.
- 5 Basson R, Berman J, Burnett A, et al. Report of the International Consensus Development Conference on Female Sexual Dysfunction: Definitions and Classifications. *J Urol* 2000; 163: 888–93.
- 6 Nusbaum M, Gamble G, Skinner B, Heiman J. The high prevalence of sexual concerns amongst women seeking routine gynaecological care. *J Family Practice* 2000; 49: 229–32.
- 7 Basson R. Woman's sexual desire – disordered or misunderstood? *J Sex Marit Ther* 2002; 28(s): 17–28.
- 8 Basson R. Rethinking low sexual desire in women. *BJOG*. 2002; 109:357–63.
- 9 Riley A. Problems of the sexual response cycle. *The Diplomat. J Diplomates R C O G* 1997; 4(4): 270–5.
- 10 Regan P, Berscheid I. Belief about the state, goals and objects of sexual desire. *J Sex Marit Ther* 2004; 22: 110–20.

- 11 Kaplan H. Intimacy disorders and sexual panic states. *J Sex Marit Ther* 1988; 14: 3–12.
- 12 Graham C, Sanders S, Milhausen R, McBride K. Turning on and turning off: A focus group study of the factors that affect women's sexual arousal. *Arch Sex Behav* 2004; 33(6): 527–38.
- 13 Laan E, Everaerd W, van der Velde J, Geer J. Determinants of subjective experience of sexual arousal in women: feedback from genital arousal and erotic stimulus content. *Psychophysiology* 1995; 32: 444–51.
- 14 Segraves K, Segraves R. Hypoactive sexual desire disorder: prevalence and comorbidity in 906 subjects. *J Sex Marit Ther* 1991; 17: 55–9.
- 15 Hurlbert D, Apt C, Rabehl S. Key variables to understanding female sexual satisfaction: an examination of women in non-distressed marriages. *J Sex Marit Ther* 1993; 19: 154–65.
- 16 Riley A, Riley E. Relevant issues in the diagnosis and management of psychosexual disorders. *Primary Care Psychiatry* 1995; 5: 161–5.