

Aphrodite's little helper: Out of the box thinking on female libido

Public discussions and advice regarding libido are hugely popular. Well-researched [articles](#), even those meant to give quick sexual advice, all point out that there is no aphrodisiac food, but there certainly are a number of libido enhancing drugs. Viagra is the most famous of the lot, but more than 25 drugs are approved for male sexual dysfunction, and some are given to women as well. By causing dilation of blood vessels within the erectile tissue, Viagra and many of the other drugs promote erectile function, and the male libido along with it.

Because the clitoris and other female genital tissues are similarly affected by blood circulation, the same drugs have been used for women. While that can be helpful in some cases, the bulk of modern research suggests that treatment female libido issues requires thinking that is, let's say, more out of the box.

Focussing on the brain

Scientists have understood for years that the most important sexual organ is the brain. This can be true for men as well as women, but for the most part treating the blood flow issue improves male sexual dysfunction. Also, sex therapists and sexuality scientists frequently point out that men and women's [minds work differently in connection with sex](#), such that mental arousal often is more central to overall female arousal compared with men. This should not be surprising, as specific genetic differences between genders are known to have an impact in [brain development](#). While the anatomic differences are minuscule, evidence suggests gender differences particularly in regions of the brain that help to [process emotions](#). As all teachers know, in young children this plays out in terms of attention span, with girls able to focus for longer periods compared with boys of the same age. When it comes to adults and sex, something similar could be happening, leading to women needing more mental activity and time for arousal to build up.

Of course, there is plenty of overlap between the genders, just as there is overlap between boys and girls in attention span. Nevertheless, based on the idea that the causes of female sexual dysfunction are more often upstairs than down, a drug called flibanserin is being promoted for what's called hypoactive sexual desire disorder (HSDD), which is estimated to afflict roughly 1 in every 10 women.

According to [Cindy Whitehead](#), CEO of Sprout Pharmaceuticals, the company that makes flibanserin, "Men have a number of treatment options for sexual dysfunction. Up until now, the treatment paradigm for women with sexual dysfunction has essentially been: Let's take a drug that works in men and let's see if it works in women."

Flibanserin therefore constitutes a completely new approach to female sexual dysfunction, and Whitehead is encouraged by results of study that Sprout conducted on 1000 women. "We increase their desire by 53 percent," she explains. "We decrease their distress by 29 percent, and then they doubled their number of satisfying sexual events."

In stories covered by popular media, various women who participated in the Sprout study have been quoted regarding very personal questions that they needed to answer daily on the study questionnaire.

“Every morning it would go off and I would have to answer if I had sex, if I had initiated sex, if I had turned it down, if I had lubricated, if I had orgasmed,” says study participant, [Amanda Parrish](#). But, while personal, answering the questions helped make her aware that the drug was working. “Within a couple weeks I began to notice a dramatic difference in the way I responded.”

Shifting the balance: How flibanserin works

Flibanserin is thought to affect sexual desire by changing the balance between three neurotransmitters, which are chemicals that act as messengers between nerve cells, or neurons. The neurotransmitters norepinephrine and dopamine are called sexual excitatory factors. When present in high concentrations in the brain, these two neurotransmitters increase the desire for sex. At the same time, another neurotransmitter called serotonin decreases sexual desire when its concentration is high. Flibanserin decreases the levels of serotonin while increasing the levels of dopamine and norepinephrine, and for this reason, theoretically, it should be very effective.

Skepticism and setbacks

Despite the mechanism in the brain making sense and the results cited by Whitehead, flibanserin has yet to be approved by the US Food and Drug Administration. Since it affects sexual desire by operating in the brain, and also comes in the form of a little pink pill, Sprout has been the target of [accusations of sexism](#). At the same time, other critics have made the case that the enthusiasm is [all about profit](#), and not at all about gender equality. Others say it a little differently, that the drug industry is [creating a need](#) where none exists.

These critiques aside, the real reason why flibanserin has not been approved is because FDA reviewers are not yet as convinced of its effectiveness as Sprout pharmaceuticals officials are. There is also concern when it comes to women taking drugs for depression, [obsessive compulsive disorder](#), and certain other conditions, since the drugs work by increasing serotonin levels -the opposite of what flibanserin does to serotonin levels. If depression involves low serotonin and lack of sexual desire involves high serotonin levels, this makes for a difficult clinical dilemma. Documenting results from questionnaires is one thing, but sexual satisfaction is a very subjective phenomenon, and so any public discussion is bound evoke numerous opinions and perspectives.

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