How do antidepressants affect sexual function?

**Evidence-based answer**

**Patients treated with** selective serotonin reuptake inhibitors (SSRIs) and the serotonin/norepinephrine reuptake inhibitor (SNRI) venlafaxine have significantly higher rates of overall sexual dysfunction—including desire, arousal, and orgasm—than patients treated with placebo (strength of recommendation [SOR]: B, randomized controlled trials [RCTs] with heterogeneous results).

Patients treated with bupropion, a norepinephrine-dopamine reuptake inhibitor (NDRI), have rates of overall sexual dysfunction comparable to placebo (SOR: B, RCTs with heterogeneous results).

**Evidence summary**

In a meta-analysis of 31 studies with 10,130 patients, researchers reported that the total rate of sexual dysfunction (SD) associated with selective serotonin reuptake inhibitors (SSRIs) was significantly higher than the placebo rate of 14.2% (Table).¹ The SSRIs citalopram, fluoxetine, paroxetine, and sertraline as well as the SNRI venlafaxine, had significantly greater rates (70%-80%) of reported total sexual dysfunction, including desire, arousal, and orgasm, than placebo.

**Bupropion has sexual dysfunction rates comparable to placebo**

Other SSRIs (fluvoxamine, escitalopram), the tricyclic antidepressant imipramine, and the SNRI duloxetine also had total SD rates significantly greater than placebo. However, the rates of dysfunction with these agents are often lower than the dysfunction rates of SSRIs such as sertraline and citalopram, and thus, may be viewed as falling into an intermediate risk category. The total SD rates for the NDRI bupropion were comparable to the placebo rate.¹

With few exceptions, all drugs associated with overall SD were associated with significant dysfunction affecting the sexual components of desire, arousal, and orgasm. The results of this meta-analysis should be interpreted with some degree of caution because methods of assessing SD varied within individual studies.

**AHRQ weighs in**

An Agency for Healthcare Research and Quality (AHRQ) review of antidepressants found that paroxetine, citalopram, and venlafaxine, when compared with other antidepressants (fluoxetine, fluvoxamine, nefazodone, sertraline), generally were associated with more reports of SD, specifically complaints of erectile dysfunction in men and decreased vaginal lubrication in women.² The number needed to treat one additional person with general sexual functioning satisfaction was 6 (95% CI, 4-9) with bupropion.²

**Recommendations**

The American College of Physicians’ clinical practice guidelines suggest that although SD is likely underreported, the NDRI bupropion has consistently shown lower rates of associated dysfunction than the SSRIs fluoxetine and sertraline.³ Conversely, the SSRI paroxetine has shown higher rates...
SSRIs and venlafaxine are associated with significantly higher rates of overall sexual dysfunction— including desire, arousal, and orgasm—than placebo.

References

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