Molly S. Clark, PhD; Kate Jansen, PhD
University of Mississippi Medical Center, Jackson

Megan Bresnahan, MSI
Science and Engineering Librarian, University of Colorado at Boulder

ASSISTANT EDITOR
William H. Replogle, PhD
University of Mississippi Medical Center, Jackson

Q/ How do antidepressants affect sexual function?

EVIDENCE-BASED ANSWER

A/ 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 buproprion.[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

TABLE

Rates of sexual dysfunction with antidepressant medications[1]

Class	Drug	Number of patients	Patients with sexual dysfunction (%)	OR (vs placebo)
	Placebo	605	14.2	—
SSRI	Citalopram	654	78.6	20.3*
	Escitalopram	305	37.0	3.4*
	Fluoxetine	1718	70.6	15.6*
	Fluvoxamine	244	25.8	3.27*
	Paroxetine	1261	71.5	16.9*
	Sertraline	970	80.3	27.4*
SNRI	Duloxetine	274	41.6	4.3*
	Venlafaxine	610	79.8	24.8*
TCA	Imipramine	54	44.4	7.2*
α-2 antagonist	Mirtazapine	49	24.5	2.3
NDRI	Bupropion	645	10.4	0.8

NDRI, norepinephrine-dopamine reuptake inhibitor; OR, odds ratio; SNRI, serotonin/norepinephrine reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor; TCA, tricyclic antidepressant.

*$P<.05$.

of adverse sexual events than other SSRIs, such as fluoxetine and fluvoxamine, and the serotonin reuptake inhibitor/antagonist nefazodone.[3] JFP

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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