

Estimating the Prevalence and Impact of Antidepressant-Induced Sexual Dysfunction in 2 European Countries: A Cross-Sectional Patient Survey

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Objective: Sexual dysfunction is a common side effect of antidepressant treatment, but recognition of the problem is variable. The aim of this study was to estimate the prevalence and impact of sexual dysfunction during antidepressant treatment in 2 European countries.

Method: A cross-sectional survey of 502 adults in France and the United Kingdom. All participants were diagnosed with depression and taking a selective serotonin reuptake inhibitor (SSRI) or serotonin-norepinephrine reuptake inhibitor (SNRI), starting within the previous 3 months. Information was gathered about other medications and conditions known to impair sexual functioning, recent changes in sexual functioning, and the impact of any changes. The Medical Outcomes Study 12-Item Short-Form Health Survey and the Arizona Sexual Experience Scale were administered to measure health status and sexual functioning. Data were collected from June to July of 2002.

Results: Applying a prevalence estimate algorithm, 26.6% of the French sample and 39.2% of the U.K. sample were classified as having antidepressant-induced sexual dysfunction; 34.2% of men and 32.5% of women were classified with antidepressant-induced sexual dysfunction. There was no clear pattern of antidepressant-induced sexual dysfunction related to specific antidepressants. Patients with antidepressant-induced sexual dysfunction reported that changes in sexual functioning negatively affected their self-esteem, mood, and relationships with sexual partners. 23.8% of the French sample and 25.2% of the U.K. sample reported that they perceived that their partner was dissatisfied with their sex life.

Conclusion: The prevalence of antidepressant-induced sexual dysfunction in this study is similar to previous estimates reported in the literature. The impact of antidepressant-induced sexual dysfunction is substantial and negatively affects quality of life, self-esteem, mood, and relationships with sexual partners.

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Impaired sexual functioning is a common feature of depressive disorders, further diminishing patient quality of life (QOL) and social functioning beyond the disruptions attributable to low mood, reduced drive, and impaired capacity for pleasure.¹ Second-generation antidepressants such as selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) have enhanced overall tolerability compared to most older antidepressants,² but, as with other antidepressants, sexual dysfunction is common.¹ Sexual dysfunction caused or exacerbated by antidepressants may not be a major concern during acute treatment of depression, but may be a greater concern during long-term treatment, as interference with sexual functioning caused by drug therapy may lead to noncompliance and subsequent relapse.^{3,4}

The normal human sexual response cycle is divided conventionally into 4 phases (desire, excitement, orgasm, and resolution), and disorders of the response can occur at 1 or more phases. In most patients, sexual dysfunction has a multifactorial origin, and patient assessment should therefore include clarification of the precise nature of the sexual problem, its development and course; the quality of any interpersonal relationships; a medical and psychiatric history; review of current use of prescribed and nonprescribed medication; and, when relevant, physical and mental state examination and laboratory investigations.⁵

The physiology of human sexual behavior is complex and influenced by many factors, including circulating hormones, hypothalamic centers, and major neurotransmitters (dopamine, 5-hydroxytryptamine [5-HT], norepinephrine, and γ -aminobutyric acid). In general, serotonergic neurotransmission exerts an inhibitory effect on animal models of male and female sexual behavior, probably mediated by stimulation of postsynaptic 5-HT_{2A} and 5-HT_{2C} receptors.^{6,7} Sexual dysfunction seen with SSRIs (principally delayed ejaculation in men and anorgasmia in women) probably results from increased availability of 5-HT at 5-HT_{2A} and 5-HT_{2C} receptors,¹ as such dysfunction can be reduced by adjuvant treatment with compounds exerting 5-HT₂ antagonist effects.^{8,9}

In the United States, sexual side effects related to antidepressant therapy are generally well recognized by patients and physicians.^{4,10-13} The aims of the present study were to obtain an estimate of the prevalence of sexual dysfunction during antidepressant treatment in 2 large European countries and to evaluate the impact of such dysfunction on patient functional status and QOL, interpersonal relationships, and mood.

METHOD

Study Sample

The study was a cross-sectional survey of approximately 500 patients (250 per country) in France and the United Kingdom. Inclusion criteria for the study required that patients were over the age of 18 years, diagnosed with depression, and taking an SSRI or SNRI that had been started within the previous 3 months. The study protocol and informed consent form were approved by relevant local research ethics committees, and written informed consent was obtained from each patient respondent.

Eligible patient participants were identified by physicians. In the United Kingdom, patients who were taking newly prescribed SSRIs or SNRIs were recruited by their doctors via telephone. Subsequently, a self-administered questionnaire was mailed to 301 interested patients, who were asked to complete and return the questionnaire to the data collection center; 250 (83%) returned the completed forms. In France, patients received a sealed envelope while visiting their physician's office. They were instructed to complete the questionnaire while at the office and seal it in an envelope when finished. Field staff gathered 252 completed questionnaires from the French offices; the exact number of questionnaires distributed to patients is unknown. Data were collected from June to July of 2002.

Measures

The survey questionnaire contained a total of 45 items, including 2 well-known and previously validated instru-

ments, the Arizona Sexual Experience Scale (ASEX)¹⁴ and the Medical Outcomes Study 12-Item Short-Form Health Survey (SF-12).¹⁵

Arizona Sexual Experience Scale. The ASEX is a 5-item rating scale designed to assess current sexual functioning (sex drive, arousal, ability to reach orgasm, and satisfaction with orgasm, as well as vaginal lubrication for females or penile erection for males). Possible total scores range from 5 to 30, with higher scores representing greater degrees of sexual dysfunction.¹⁴ The scale developers offer a working definition of sexual dysfunction as a total ASEX score of 19 or greater.

Medical Outcomes Study 12-Item Short-Form Health Survey. The SF-12 is a generic measure of health status, appropriate for use in both general and condition-specific populations.¹⁵ Two summary scores were computed, the Physical Component Summary (PCS) score and the Mental Component Summary (MCS) score, both ranging from 0 to 100, with higher scores suggesting better functioning.

Additional questionnaire items were included to gather information about patients' demographic details, current antidepressant treatment, changes in sexual functioning since starting treatment, the impact of any such changes, and other medications and conditions that could impair sexual functioning. The SF-12 and ASEX were already available and validated for use in English and French; the remainder of the questionnaire was reviewed for accuracy by experts from each country.

Statistical Analysis

Mean ASEX, SF-12 PCS, and SF-12 MCS scores in the 2 study samples were computed. Study participants were classified on the basis of ASEX score and other questionnaire responses to obtain estimates of the prevalence of antidepressant-induced sexual dysfunction. The impact of changes in sexual function on functional status, self-esteem, mood, relationships, and QOL was estimated and tested using analysis of variance (ANOVA) techniques, comparing patients with antidepressant-induced sexual dysfunction to those without antidepressant-induced sexual dysfunction.

RESULTS

Approximately two thirds of both samples were women. The mean age was similar in the 2 samples (U.K., 40.0 years, SD = 12.1; France, 43.3 years, SD = 12.6). As shown in Table 1, in the U.K. sample, the most commonly used antidepressant was fluoxetine (48.0%); in France, paroxetine (30.2%). A large proportion of patients were being treated for anxiety (U.K., 54.0%; France, 68.7%). No other medical conditions were common in the patient samples.

A large proportion of patients reported use of medications other than antidepressants that are known to poten-

Table 1. Study Sample Demographic and Clinical Characteristics

Characteristic	France (N = 252)	United Kingdom (N = 250)
Sex ^a		
Female, N (%)	177 (70.8)	168 (67.2)
Male, N (%)	73 (29.2)	82 (32.8)
Age in years, mean (SD)	43.3 (12.6)	40.0 (12.1)
Antidepressant use, N (%)		
Citalopram	56 (22.2)	36 (14.4)
Fluoxetine	55 (21.8)	120 (48.0)
Paroxetine	76 (30.2)	62 (24.8)
Sertraline	32 (12.7)	12 (4.8)
Venlafaxine	34 (13.5)	23 (9.2)
Other SSRI or SNRI	16 (6.3)	26 (10.4)
Selected medical conditions, N (%)		
Diabetes	14 (5.6)	20 (8.0)
Hypertension	31 (12.3)	30 (12.0)
Irritable bowel syndrome	22 (8.7)	28 (11.2)
Migraines	28 (11.1)	35 (14.0)
Arthritis	13 (5.2)	35 (14.0)
Anxiety	173 (68.7)	135 (54.0)
Any selected medical condition	200 (79.4)	181 (72.4)
SF-12 scores, mean (SD)		
PCS	46.91 (9.1)	45.43 (12.2)
Norms for country ^b	50.55 (7.8)	50.24 (9.9)
MCS	35.90 (10.2)	36.96 (10.9)
Norms for country ^b	48.31 (9.5)	51.63 (8.9)

^aTwo French respondents did not provide gender information.

^bData from Gandek and Ware.¹⁶

Abbreviations: MCS = Mental Component Summary, PCS = Physical Component Summary, SF-12 = Medical Outcomes Study 12-Item Short-Form Health Survey, SNRI = serotonin-norepinephrine reuptake inhibitor, SSRI = selective serotonin reuptake inhibitor.

tially affect sexual functioning (U.K., 70.8%; France, 77.4%). The majority of each sample was taking medication to relieve anxiety or enhance sleep (U.K., 55.6%; France, 61.5%). Other commonly prescribed medications included hormones such as estrogen, testosterone, or thyroid hormone (U.K., 14.4%; France, 13.5%); medications for high blood pressure (U.K., 13.2%; France, 21.0%); or medications for heart disease (U.K., 13.2%; France, 4.8%).

Physical and Mental Functioning

The mean SF-12 PCS score in the U.K. sample was 45.43, lower than the U.K. general population norm (50.24) for both sexes and all age groups combined.¹⁶ The mean MCS score for the U.K. sample was 36.96, substantially lower than the U.K. general population norm (51.63). In the French sample, the mean PCS score was 46.91 and the mean MCS score was 35.90—both lower than the general population norms reported for France (50.55 and 48.31, respectively).¹⁶ The difference between the patient sample means and population norms was similar in the 2 countries, with PCS score mean values about one half of a standard deviation below norms. The MCS score means were substantially lower, at approximately 1.5 standard deviations below MCS score norms.

Current Sexual Functioning

To help with interpretation of questionnaire items assessing sexual functioning, patients were asked whether they had a regular sexual partner, and the time since their most recent sexual activity. A substantial minority did not have a sexual partner (U.K., 24.4%; France, 31.0%). Although a large number of patients reported having been sexually active in the past week (36.4% in the United Kingdom, and 41.3% in France), many patients reported having had no sexual activity in the past 4 weeks: 76 (30.4%) in the U.K. sample and 76 (30.2%) in the French sample reported that their most recent sexual activity (either alone or with a partner) was “more than 4 weeks ago.”

Patients were also asked about the importance of sex in their lives, their enjoyment of sexual activity, and perceived partner satisfaction. In response to the question “In the past 3 months, how important was a sexual relationship and/or sexual activity in your life?” 67% of the British sample and more than 80% of the French sample rated their sexual relationship or sexual activity as being of some importance. When asked “In the past 3 months, how enjoyable or pleasurable was your sexual life/activity?” most patients responded that their sexual life and sexual activity was at least somewhat enjoyable, but 37 patients (14.8%) in the U.K. sample and 29 patients (11.5%) in the French sample reported that their sexual life/activity was “not enjoyable at all.” In response to the question “If you have a partner, how satisfied do you think your partner is with your sex life?” the modal response was “mostly satisfied” in both countries (U.K., 68 patients, 27.2%; France, 69 patients, 27.4%); however, a substantial minority reported that they perceived their partner was dissatisfied (either “mostly dissatisfied” or “very dissatisfied”) with their sex life (U.K., 63 patients, 25.2%; France, 60 patients, 23.8%).

The mean ASEX score in both samples exceeded the instrument developers’ recommended threshold indicating the likely presence of sexual dysfunction: in the U.K. sample, 21.10 (SD = 6.1); in France, 21.68 (SD = 6.4). The majority of patients had an ASEX score of 19 or greater: in the United Kingdom, 154 patients (61.6%); in France, 156 patients (61.9%).

Changes in Sexual Functioning

To assess possible changes in sexual functioning, patients were asked, “Compared to before you started taking your antidepressant, how would you rate each of the following aspects of your sex life now?” All 5 aspects of sexual functioning from the ASEX scale were included: sex drive, arousal, erection (males) or lubrication (females), orgasm, and satisfaction. Table 2 displays the response frequencies (and percentages) and means for each item, including the possible positive effects of antidepressants on sexual functioning (i.e., “much better now” and

Table 2. Change in Sexual Functioning Item Scores in SSRI- or SNRI-Treated Patients by Country^a

ASEX Item	Much Better Now, N (%)	A Little Better Now, N (%)	About the Same, N (%)	A Little Worse Now, N (%)	Much Worse Now, N (%)	Mean (SD)
Sex drive						
France (N = 240)	27 (11.2)	45 (18.8)	107 (44.6)	38 (15.8)	23 (9.6)	2.94 (1.1)
United Kingdom (N = 243)	31 (12.8)	28 (11.5)	92 (37.9)	52 (21.4)	40 (16.5)	3.17 (1.2)
Arousal						
France (N = 236)	24 (10.2)	44 (18.6)	109 (46.2)	33 (14.0)	26 (11.0)	2.97 (1.1)
United Kingdom (N = 242)	26 (10.7)	27 (11.2)	102 (42.1)	51 (21.1)	36 (14.9)	3.18 (1.1)
Penile erection (males)						
France (N = 71)	7 (9.9)	11 (15.5)	37 (52.1)	12 (16.9)	4 (5.6)	2.93 (1.0)
United Kingdom (N = 81)	7 (8.6)	7 (8.6)	34 (42.0)	21 (25.9)	12 (14.8)	3.30 (1.1)
Vaginal lubrication (females)						
France (N = 163)	17 (10.4)	18 (11.0)	91 (55.8)	20 (12.3)	17 (10.4)	3.01 (1.0)
United Kingdom (N = 160)	11 (6.9)	11 (6.9)	93 (58.1)	21 (13.1)	24 (15.0)	3.23 (1.0)
Ability to reach orgasm						
France (N = 210)	22 (10.5)	27 (12.9)	110 (52.4)	30 (14.3)	21 (10.0)	3.00 (1.0)
United Kingdom (N = 228)	26 (11.4)	18 (7.9)	103 (45.2)	47 (20.6)	34 (14.9)	3.20 (1.1)
Satisfaction with orgasm						
France (N = 206)	22 (10.7)	23 (11.2)	119 (57.8)	20 (9.7)	22 (10.7)	2.99 (1.0)
United Kingdom (N = 227)	25 (11.0)	12 (5.3)	118 (52.0)	40 (17.6)	32 (14.1)	3.19 (1.1)

^aOwing to questionnaire nonresponse, Ns and denominators for percentages vary across ASEX items.

Abbreviations: ASEX = Arizona Sexual Experience Scale, SNRI = serotonin-norepinephrine reuptake inhibitor, SSRI = selective serotonin reuptake inhibitor.

“a little better now”). For all 5 items in both samples, the most common response was that the aspect of sexual function being assessed was “about the same”; because very similar proportions of patients reported either an improvement or a deterioration, the mean scores are all reasonably close to the midpoint of 3 (“about the same”). The mean scores for the U.K. sample are somewhat higher (indicating worse sexual function) than those for the French sample.

Impact of Changes in Sexual Functioning

The impact of changes in sexual functioning on QOL was addressed by the question “Since you started taking your antidepressant, to what extent have any changes in your sexual functioning negatively affected each of the following?” (Table 3). The majority of patients in each sample reported at least “a little bit” of a decrement on every dimension. Between 15% to 25% of respondents in each country noted that changes in sexual functioning had negatively affected their self-esteem, relationships, and mood either “a good bit” or “a great deal.”

Estimates of Prevalence of Antidepressant-Induced Sexual Dysfunction

The prevalence of antidepressant-induced sexual dysfunction can be estimated from the survey data using a range of methods, the most rigorous yielding the most conservative results. For example, a liberal estimate of the prevalence of antidepressant-induced sexual dysfunction could be based on those patients reporting either “a little worse now” or “much worse now” in response to the questions regarding changes in sexual functioning (“Compared to before you started taking your antidepressant, how would you rate each of the following aspects of

your sex life now?”). A more conservative estimate would exclude patients whose sexual dysfunction may have another cause, for example, certain comorbid conditions (e.g., diabetes, urogenital diseases, hypertension, or irritable bowel syndrome) or concomitant medications (e.g., for high blood pressure, heart disease or abnormal heart rhythm, or hormones such as estrogen, testosterone, or thyroid). A further prevalence estimate could be obtained, in which patients with unremarkable ASEX scores (i.e., total ASEX scores less than 19) are removed so that only those patients with sexual dysfunction who noted a decrement in their function not attributable to other causes were classified as having antidepressant-induced sexual dysfunction.

The estimate of the prevalence of antidepressant-induced sexual dysfunction used here represents those patients who reported either “a little worse now” or “much worse now” in response to the questions regarding changes in sexual functioning and who also obtained ASEX scores indicative of sexual dysfunction. This estimate does not consider other possible causes of sexual dysfunction, as all of these patients noted a decrease in their functioning since antidepressant treatment was initiated, and this decrement is therefore likely to be over and above any problems caused by continuing comorbid conditions or concomitant medications. Employing this definition of antidepressant-induced sexual dysfunction, the estimated prevalence was 39.2% (N = 98) of the U.K. sample and 26.6% (N = 67) of the French sample being categorized as suffering from sexual dysfunction attributable to SSRI or SNRI treatment.

Using the various definitions of ADSD, estimates ranged from a minimum of 21.6% in the U.K. sample and 20.2% in the French sample to 52.0% in the U.K.

Table 3. Negative Effects of Sexual Dysfunction in SSRI- or SNRI-Treated Patients by Country^a

Domain	Not at All	A Little Bit	A Good Bit	A Great Deal	Mean (SD)
Self-esteem					
France (N = 240)	114 (47.5)	86 (35.8)	35 (14.6)	5 (2.1)	1.71 (0.8)
UK (N = 241)	117 (48.6)	77 (32.0)	30 (12.4)	17 (7.0)	1.78 (0.9)
Relationship					
France (N = 235)	100 (42.5)	91 (38.7)	34 (14.5)	10 (4.3)	1.80 (0.8)
UK (N = 232)	101 (43.5)	74 (31.9)	33 (14.2)	24 (10.3)	1.91 (1.0)
Mood					
France (N = 239)	103 (43.1)	87 (36.4)	44 (18.4)	5 (2.1)	1.79 (0.8)
UK (N = 241)	97 (40.3)	83 (34.4)	37 (15.3)	24 (10.0)	1.95 (1.0)
Overall QOL					
France (N = 238)	106 (44.5)	88 (37.0)	38 (16.0)	6 (2.5)	1.76 (0.8)
UK (N = 241)	109 (45.2)	79 (32.8)	34 (14.1)	19 (7.9)	1.85 (0.9)

^aOwing to questionnaire nonresponse, Ns and denominators for percentages vary across domains. Abbreviations: QOL = quality of life, SNRI = serotonin-norepinephrine reuptake inhibitor, SSRI = selective serotonin reuptake inhibitor, UK = United Kingdom.

Table 4. PCS and MCS Scores^a by Country in Patients With or Without Antidepressant-Induced Sexual Dysfunction^b

Item	France		United Kingdom	
	No Dysfunction (N = 185)	Dysfunction (N = 67)	No Dysfunction (N = 152)	Dysfunction (N = 98)
PCS score	47.10 (9.1)	46.31 (9.1)	45.98 (11.6)	44.58 (13.1)
MCS score*	36.83 (10.8)	33.10 (7.7)	38.15 (11.1)	35.08 (10.3)

^aScores derived from the Medical Outcomes Study 12-Item Short-Form Health Survey can range from 0–100, with higher scores suggesting better functioning.

^bValues shown as mean (SD).

*Significant difference between patients with antidepressant-induced sexual dysfunction and those without ($F = 3.83, p = .01$).

Abbreviations: MCS = Mental Component Summary, PCS = Physical Component Summary.

sample and 32.5% in the French sample. Overall, 34.2% of men (U.K., 41.5%; France, 26.0%) and 32.5% of women (U.K., 38.1%; France, 27.1%) were classified as suffering from antidepressant-induced sexual dysfunction. The pattern of antidepressant-induced sexual dysfunction did not vary notably across antidepressants.

Impact on Functional Status and Quality of Life

We wished to ascertain whether antidepressant-induced sexual dysfunction–classified patients differed from the rest of the sample in terms of SF-12 PCS and MCS scores. Table 4 provides the means and standard deviations for the 2 subgroups (i.e., patients with and patients without antidepressant-induced sexual dysfunction) for each country. The interaction of country × antidepressant-induced sexual dysfunction class was not a statistically significant predictor of SF-12 PCS or MCS scores in either of the ANOVAs, nor was the main effect for country statistically significant. However, the main effect for antidepressant-induced sexual dysfunction classification was found to be statistically significant, with SF-12 MCS scores being significantly worse among patients classified with antidepressant-induced sexual dysfunction compared to patients without antidepressant-

Table 5. Negative Effects of Changes in Sexual Functioning in Patients With Antidepressant-Induced Sexual Dysfunction by Country^a

Domain	Not at All, N (%)	A Little Bit, N (%)	A Good Bit, N (%)	A Great Deal, N (%)
Self-esteem				
France (N = 65)	18 (27.7)	30 (46.2)	14 (21.5)	3 (4.6)
UK (N = 97)	38 (39.2)	36 (37.1)	13 (13.4)	10 (10.3)
Relationship				
France (N = 64)	14 (21.9)	24 (37.5)	20 (31.2)	6 (9.4)
UK (N = 96)	32 (33.3)	35 (36.5)	12 (12.5)	17 (17.7)
Mood				
France (N = 64)	14 (21.9)	29 (45.3)	18 (28.1)	3 (4.7)
UK (N = 97)	33 (34.0)	38 (39.2)	12 (12.4)	14 (14.4)
Overall QOL				
France (N = 63)	13 (20.6)	32 (50.8)	15 (23.8)	3 (4.8)
UK (N = 97)	37 (38.1)	35 (36.1)	14 (14.4)	11 (11.3)

^aOwing to questionnaire nonresponse, Ns and denominators for percentages vary across ASEX items.

Abbreviations: QOL = quality of life, UK = United Kingdom.

induced sexual dysfunction ($F = 3.83, df = 3, 464; p = .01$); PCS score means, however, did not differ across the 2 groups.

A series of questions asked patients about the negative effects of any changes in sexual functioning (“Since you started taking your antidepressant, to what extent have any changes in your sexual functioning negatively affected each of the following?”) on self-esteem, relationship, mood, and overall QOL. For every domain, considerably more than half of the patients with antidepressant-induced sexual dysfunction reported some negative effects (Table 5).

Another set of hypothesis tests investigated whether antidepressant-induced sexual dysfunction–classified patients differed significantly in terms of self-esteem, relationship, mood, and overall QOL from patients who were not classified as suffering from antidepressant-induced sexual dysfunction. In none of the ANOVAs was the interaction of country × antidepressant-induced sexual dysfunction class a statistically significant predictor (Table 6);

Table 6. Negative Effects of Antidepressant-Induced Changes in Sexual Functioning by Country^a

Domain ^b	France		United Kingdom	
	No		No	
	Dysfunction (N = 185)	Dysfunction (N = 67)	Dysfunction (N = 152)	Dysfunction (N = 98)
Self-esteem*	1.59 (0.7)	2.03 (0.8)	1.67 (0.9)	1.95 (1.0)
Relationship**	1.63 (0.7)	2.28 (0.9)	1.75 (0.9)	2.15 (1.1)
Mood**	1.66 (0.8)	2.16 (0.8)	1.87 (0.9)	2.07 (1.0)
Overall QOL*	1.63 (0.8)	2.13 (0.8)	1.75 (0.9)	1.99 (1.0)

^aValues shown as mean (SD) computed based on 1 = "not at all," 2 = "a little bit," 3 = "a good bit," 4 = "a great deal."

^bDifference between patients with or without antidepressant-induced sexual dysfunction: * $p < .001$; ** $p < .0001$.
Abbreviation: QOL = quality of life.

neither was the main effect for country statistically significant. The main effect for antidepressant-induced sexual dysfunction classification was found to be statistically significant in all 4 domains (for self-esteem, $F = 6.65$, $df = 3$, 477, $p = .0002$; for relationships, $F = 12.80$, $df = 3$, 463, $p < .0001$; for mood, $F = 7.12$, $df = 3$, 476, $p < .0001$; for QOL, $F = 6.89$, $df = 3$, 475, $p = .0002$), indicating that patients classified as having antidepressant-induced sexual dysfunction reported more negative effects as a result of changes in sexual functioning.

DISCUSSION

Definitive information about the incidence and impact of sexual dysfunction with antidepressants is best derived from a longitudinal study of sexual function in depressed patients, with assessments before and after long-term antidepressant treatment.^{17,18} However, these studies are costly and difficult to perform. The aim of this study was to estimate the prevalence and evaluate the impact of antidepressant-induced sexual dysfunction in samples from 2 European countries. Based on a conservative analysis, the prevalence of sexual dysfunction attributable to SSRI or SNRI treatment was estimated to be 39.2% in the U.K. sample and 26.6% in the French sample.

The study has a number of limitations, and these prevalence estimates must therefore be interpreted with caution. The use of retrospective self-ratings, the cross-sectional nature of the investigation, and the absence of a measure of depressive symptoms together make it difficult to determine whether sexual dysfunction may have been due to persistent depressive symptoms or antidepressant treatment. However, the questionnaire's specified reference period ("Compared to before you started taking your antidepressant" and "Since you started taking your antidepressant") attempted to minimize this uncertainty. Furthermore, it is not possible to make comparisons between the U.K. and French survey samples, due to differences in health care setting and the method of patient recruitment. Finally, the selective nature of the study

sample (patients were recruited by their physicians) is another potential limitation, but the derived conservative prevalence estimate for antidepressant-induced sexual dysfunction of 26.6% to 39.2% in this study is not dissimilar to previous prevalence estimates.¹

The possible additional burden of emergent sexual dysfunction in antidepressant-treated patients has been the subject of much comment but few previous detailed investigations.¹ The findings of this study indicate that there are important differences between groups of patients with antidepressant-induced sexual dysfunction and those without. In this investigation, those classified as having antidepressant-induced sexual dysfunction reported significantly worse mental well-being, self-esteem, mood, relationships, and overall QOL. Furthermore, the majority of patients with antidepressant-induced sexual dysfunction reported negative effects in every domain.

While most antidepressants have broadly similar efficacy, they differ in their side effect profile and in their effect on sexual function. The findings of this study indicate that the presence of sexual dysfunction during antidepressant treatment is associated with reduced QOL and adverse effects on mood, self-esteem, and interpersonal relationships. As such, the sensitive choice of antidepressant is an especially important consideration in those patients concerned with preserving their sexual function.

Drug names: citalopram (Celexa and others), fluoxetine (Prozac and others), paroxetine (Paxil, Pexeva, and others), sertraline (Zoloft), venlafaxine (Effexor).

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