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# Sexual disorders and associated help-seeking behaviors in Canada

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**Objectives:** To study sexual activity, the prevalence of sexual difficulties and related help-seeking behaviors, among mature adults in Canada.

**Materials and methods:** A telephone survey (random digit dialed) was conducted in Canada in 2001 to 2002. Interviews were based on a standardized questionnaire, including demographics, general health, relationships, and sexual behaviors, attitudes and beliefs. The survey was completed by a total of 1007 individuals (500 men and 507 women) aged 40 to 80 years in Canada.

**Results:** Overall, 83% of men and 71% of women had engaged in sexual intercourse during the 12 months preceding the interview, and 42% of men and 36% of women engaged in sexual intercourse more than once a

week. Early ejaculation (23%) and erectile difficulties (16%) were the sexual problems most frequently reported by men. The sexual problems most frequently reported by women were a lack of sexual interest (30%) and lubrication difficulties (24%). Older age (60 to 80 years compared with 40 to 49 years) and diagnoses of depression and diabetes were all significant predictors of erectile difficulties in men. More than 75% of men and women had sought no help for their sexual problem(s) from a health professional.

**Conclusions:** Many middle aged and older adults in Canada report continued sexual interest and activity. Although a number of sexual problems are highly prevalent in this population, few individuals seek medical help for these problems. This may be partly because they are not sufficiently bothered by the problem or do not think that it is serious.

**Key Words:** epidemiology, health surveys, impotence, prevalence, sex, sexual disorders

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## Introduction

During the past 10 years, the prevalence of sexual problems among middle-aged and older individuals has been the subject of many studies. The majority of these studies have involved the populations of developed nations particularly in Europe,<sup>1-5</sup> and in the Americas.<sup>6-14</sup> Although a substantial number of studies have investigated the prevalence of sexual problems in Central and South America<sup>12-14</sup> and the United States,<sup>6-10</sup> we have been able to identify only one Canadian national study of male erectile function and sexual satisfaction.<sup>11</sup>

The male sexual problems of erectile dysfunction

and early ejaculation and their risk factors have received most attention, while fewer studies have specifically investigated the prevalence and correlates of female sexual dysfunction.<sup>15-17</sup> Furthermore, there is little published information on the average frequency of sexual activity and the importance of sexual relationships among older men and women, even though the few studies that have examined sexuality in this age group have found that men and women generally maintain their sexual interest and activity well into older age.<sup>18-20</sup>

Existing studies of the prevalence and correlates of sexual disorders have used a variety of study designs and definitions, and these differences make it difficult to conduct valid cross-national comparisons. Moreover, to date there have been no multi-country studies that have explored how men and women from different cultures seek help to manage or overcome their sexual problems.

The Global Study of Sexual Attitudes and Behaviors (GSSAB) was a population survey of 27,500 men and women aged 40 to 80 years in 29 countries representing many world regions.<sup>21-23</sup> Here we report the results from the respondents in Canada.

## Materials and methods

Using a random-digit dialed sampling design, computer-assisted telephone interviews (CATIs) were carried out in Canada during 2001 and 2002. Respondents were randomly selected by asking for the man or woman in the household aged between 40 and 80 years of age (participants were interviewed by interviewers of the same gender). Women and men were sampled in approximately equal numbers, by design.

A structured questionnaire requested information concerning general health, demographics, relationships, and sexual behaviors, attitudes and beliefs.

The subjects were asked if they had engaged in sexual intercourse during the previous 12 months and the presence of sexual dysfunction was assessed by means of two sequential questions. The respondents were first asked whether they had experienced one or more of the sexual problems listed in Table 1 for a period of at least 2 months during the previous year, and those who answered 'Yes' were then asked whether they had experienced the problem 'occasionally', 'sometimes' or 'frequently'.

Logistic regression was used to investigate potential factors associated with a selected sexual dysfunction. In these analyses, the presence of a sexual dysfunction was coded only for those respondents who reported experiencing the problem

frequently or periodically, while those who indicated that they experienced the problem only occasionally were recoded to indicate no sexual dysfunction.

The subjects who reported that they had experienced a sexual problem were asked whether they had sought help from a number of possible sources. The options included: 'Talked to partner', 'Talked to a medical doctor (other than a psychiatrist)', 'Looked for information anonymously (in books/magazines or on the internet)', 'Talked to family member or friend', 'Taken prescription drugs/devices or talked to pharmacist', 'Talked to psychiatrist or psychologist or marriage counselor', 'Talked to a clergy person or religious adviser', 'Called a telephone help line', 'Other - please specify'. Respondents could indicate that they had sought help from more than one source.

The subjects with sexual problems who had not consulted a physician were asked why they had not done so, and offered a list of 14 possible reasons (from which they were to check all that applied). The reasons included attitudes and beliefs regarding the sexual problem and the patient-doctor relationship. All respondents (irrespective of whether they reported any sexual problems) were also asked 'During a routine office visit or consultation in the past 3 years, has your physician asked you about possible sexual difficulties without you bringing it up first?' (Yes/No) and 'Do you think a doctor should routinely ask patients about their sexual function?' (Yes/No).

The categorization of household income as 'low', 'medium' or 'high' was based on the distribution of income in Canada.

The prevalence of a specific characteristic was calculated by dividing the number of cases by the corresponding population. The denominator for the calculation of the prevalence of sexual problems was the number of sexually active people (i.e. at least one episode of intercourse during the previous 12 months). The prevalence estimates are given with their confidence intervals (CI).<sup>24</sup>

## Results

### *Characteristics of study population*

Overall, 15,611 individuals in Canada were contacted, 5,256 of whom were not eligible to participate. Of the 10,355 eligible individuals, a total of 1,007 individuals (500 men and 507 women) completed the survey, for a response rate of 9.7%. Table 2 presents selected characteristics of the study sample. Household income was categorized as 'low', 'medium', or 'high', based on the distribution of income in Canada (in

TABLE 1. Prevalence of sexual problems by gender and severity, Canada, 2001–2002

	% Men (95% confidence interval)	% Women (95% confidence interval)
<b>Lack of sexual interest</b>	<b>15.2 (11.9, 19.1)</b>	<b>29.7 (25.0, 34.7)</b>
Occasional	9.7 (7.0, 13.0)	18.4 (14.5, 22.8)
Periodic	3.0 (1.5, 5.1)	6.2 (3.9, 9.3)
Frequent	1.7 (0.7, 3.5)	4.5 (2.6, 7.2)
<b>Lubrication difficulties</b>	–	<b>23.9 (19.6, 28.7)</b>
Occasional	–	11.7 (8.5, 15.6)
Periodic	–	4.3 (2.4, 7.0)
Frequent	–	7.7 (5.1, 11.0)
<b>Inability to reach orgasm</b>	<b>11.8 (8.8, 15.4)</b>	<b>21.5 (17.3, 26.2)</b>
Occasional	6.7 (4.5, 9.6)	10.1 (7.2, 13.8)
Periodic	2.5 (1.2, 4.5)	4.9 (2.9, 7.8)
Frequent	2.0 (0.9, 3.9)	5.5 (3.3, 8.5)
<b>Sex not pleasurable</b>	<b>9.1 (6.5, 12.3)</b>	<b>16.4 (12.7, 20.7)</b>
Occasional	4.8 (2.9, 7.3)	7.7 (5.1, 11.0)
Periodic	1.5 (0.6, 3.2)	3.4 (1.8, 5.9)
Frequent	0.8 (0.2, 2.2)	4.6 (2.6, 7.3)
<b>Pain during sex</b>	<b>4.4 (2.6, 6.9)</b>	<b>15.5 (11.9, 19.7)</b>
Occasional	1.5 (0.5, 3.2)	7.6 (5.1, 10.9)
Periodic	1.0 (0.3, 2.5)	3.4 (1.8, 5.9)
Frequent	1.2 (0.4, 2.9)	4.0 (2.2, 6.6)
<b>Early ejaculation</b>	<b>22.5 (18.5, 26.9)</b>	–
Occasional	14.0 (10.7, 17.7)	–
Periodic	4.7 (2.9, 7.3)	–
Frequent	3.2 (1.7, 5.5)	–
<b>Erectile difficulties</b>	<b>16.0 (12.5, 19.9)</b>	–
Occasional	10.1 (7.3, 13.4)	–
Periodic	2.9 (1.5, 5.1)	–
Frequent	2.9 (1.5, 5.1)	–

Note: based on reports from sexually active respondents. Percentage in the first row of each panel indicates the average of sexual dysfunction, defined as an experience of dysfunction for a period of 2 months or more. The difference between the average and the sum of the three levels of severity of sexual dysfunction indicates the proportion who failed to specify the level of severity. All prevalences are adjusted according to the age distribution of the total of sexually active men and women in Canada in this sample.

Canadian dollars, \$): low = under \$30,000; medium = from \$30,000 up to \$59,999; high = \$60,000 or more.

### *Prevalence of sexual problems*

Early ejaculation, the most common male sexual problem, was reported by 22.5% of the sexually active men in Canada, Table 1. Erectile difficulties and a lack of interest in sex were the next most common male sexual problems in the Canadian sample, and were reported by 16.0% and 15.2% of sexually active men, respectively. These three most common sexual problems were experienced periodically or frequently

in approximately one-third of cases. Other sexual problems, including an inability to reach orgasm (11.8%) and not finding sex pleasurable (9.1%) were somewhat less prevalent among sexually active men in Canada, and pain during sex (4.4%) was the least commonly reported male sexual problem.

A lack of interest in sex (29.7%) was the most commonly reported sexual problem among sexually active women in Canada, followed by difficulty becoming adequately lubricated (23.9%), an inability to reach orgasm (21.5%), not finding sex pleasurable (16.4%), and pain during sex (15.5%), Table 1.

TABLE 2. Selected characteristics (%) of respondents, Canada, 2001–2002

	Men (n=500)	Women (n=507)
<b>Age group (years)</b>		
40–49	40.8	46.0
50–59	30.0	24.5
60–69	17.8	15.6
70–80	11.4	14.0
<b>Relationship status</b>		
Married or ongoing partnership	66.3	64.7
Divorced/separated without sex partner	17.0	15.3
Widowed without sex partner	4.4	12.1
Single without sex partner	12.2	7.9
<b>Urban/suburban residential setting</b>	72.4	65.7
<b>Education</b>		
Primary school or less	5.1	3.9
Secondary/high school	50.8	53.8
At least some college	44.1	42.2
<b>Household income</b>		
Low	21.1	31.2
Medium	45.2	42.5
High	33.8	26.2
<b>Current employment status</b>		
Employed	67.0	50.2
Unemployed	3.8	6.6
Homemaker	0.2	13.0
Retired	29.0	30.2
<b>Religion</b>		
Christian/Jew	86.8	88.9
Muslim	1.2	0.6
Buddhist or other Asian	0.8	1.0
Atheist	10.4	8.7
Other, specified	0.2	0.8
Not specified	0.6	
<b>Good to excellent general health*</b>	80.4	77.7
<b>Intercourse in the last 12 months</b>	82.9	71.4
<b>Intercourse more than once a week</b>	41.8	35.5

\*Self-reported 'good' or 'excellent' general health (versus 'fair' or 'poor')

Approximately one-half of the women who reported each of these sexual problems said that she had experienced it frequently or periodically.

Physical health conditions, and demographic and socioeconomic factors associated with three sexual dysfunctions (i.e. sexual problems that were experienced periodically or frequently) were investigated using logistic regression and the findings expressed as odds ratios [OR]. Older age (age 60 to

80 years compared with the referent age of 40 to 49 years) was a significant correlate only of erectile difficulties in men (OR 5.34,  $p \leq 0.01$ ), while a lower than average level of physical activity was a significant correlate of a lack of sexual interest in men (OR 3.19,  $p \leq 0.01$ ) and an inability to reach orgasm in women (OR 2.24,  $p \leq 0.05$ ). Smoking currently or in the past was also a significant correlate of an inability to reach orgasm among women (OR 2.25,  $p \leq 0.05$ ). A diagnosis

of depression was significantly associated with erectile difficulties in men (OR 6.01,  $p \leq 0.001$ ), and a lack of sexual interest (OR 2.33,  $p \leq 0.05$ ) and an inability to reach orgasm (OR 2.26,  $p \leq 0.01$ ) in women. Among men, a diagnosis of diabetes was also associated with erectile difficulties (OR 5.50,  $p \leq 0.001$ ).

### *Help-seeking behavior*

The prevalence of selected help-seeking behaviors for sexual problems in Canada is summarized in Table 3. Among respondents in Canada who were sexually active and who reported experiencing at least one sexual problem, the pattern of help-seeking behavior was generally similar for men and women. Talking to their partner was by far the most common action taken by both men and women (46.3% and 51.5%, respectively). More women (17.7%) than men (9.1%) reported talking to a family member or friend and few men or women had talked to a psychiatrist, psychologist or marriage counselor (5.9% of men and

5.6% of women), or to a member of the clergy or religious adviser (1.4% of men and 1.1% of women).

More than three-quarters of the sexually active respondents who reported experiencing at least one sexual problem had not sought help or advice from a health professional (75.3% of men and 76.6% of women) and 38.4% of men and 30.6% of women had not taken any action, i.e. they had not sought any help or advice.

### *Factors associated with seeking medical help for sexual problems*

Some health, demographic, socioeconomic and attitudinal factors that might be associated with seeking medical help for sexual problems were investigated using logistic regression and the findings expressed as odds ratios [OR]. The only sexual problems that were associated with a greater likelihood of seeking medical help were erectile difficulties in men (OR 4.08,  $p \leq 0.01$ ) and lubrication

TABLE 3. Prevalence of help-seeking behaviours for sexual problems by gender, Canada 2001–2002

	% (95% confidence interval)
<b>Men</b>	
Talked to partner	46.3 (39.6, 53.2)
Looked for information anonymously (in books/magazines or via telephone help-line/Internet)	22.5 (17.1, 28.6)
Talked to medical doctor	19.8 (14.8, 25.7)
Taken drugs/used devices or talked to pharmacist	16.4 (11.8, 22.0)
Talked to family member/friend	9.1 (5.7, 13.8)
Talked to psychiatrist, psychologist or marriage counsellor	5.9 (3.2, 9.9)
Talked to a clergy person or religious adviser	1.4 (0.3, 4.0)
Sought no help from a health professional	75.3 (69.1, 80.9)
No action taken	38.4 (31.9, 45.3)
<b>Women</b>	
Talked to partner	51.5 (45.3, 57.6)
Looked for information anonymously (in books/magazines or via telephone help-line/Internet)	26.8 (21.6, 32.6)
Talked to family member/friend	17.7 (13.4, 22.8)
Talked to medical doctor	17.5 (13.2, 22.5)
Taken drugs/used devices or talked to pharmacist	15.6 (11.4, 20.4)
Talked to psychiatrist, psychologist or marriage counsellor	5.6 (3.1, 9.0)
Talked to a clergy person or religious adviser	1.1 (0.2, 3.2)
Sought no help from a health professional	76.6 (71.1, 81.5)
No action taken	30.6 (25.1, 36.5)

Note: based on reports from respondents complaining of at least one sexual problem. All prevalences are adjusted according to the age distribution of the total of sexually active men and women in Canada in this sample.

difficulties in women (OR 2.69,  $p \leq 0.05$ ). Furthermore, among both men (OR 2.18,  $p \leq 0.05$ ) and women (OR 3.18,  $p \leq 0.05$ ), having been asked by a doctor about possible sexual difficulties during a routine visit in the past 3 years was significantly correlated with seeking medical help for sexual problems.

### *Attitudes and beliefs about diagnosis and treatment of sexual problems*

The prevalence of selected attitudes and beliefs about diagnosis of and treatment for sexual problems was remarkably similar for men and women in Canada. The most common reason cited among respondents in Canada for not consulting a doctor about a sexual problem was believing that it is a normal part of aging or being comfortable as he/she is (77.1% of men and 81.7% of women), followed by thinking it was not very serious or waiting for the problem to go away (56.3%

of men and 60.3% of women) and thinking that it is not a medical problem or that a doctor would not be able to help much (47.1% of men and 50.2% of women), Table 4.

Few respondents in Canada had been asked by a doctor about possible sexual difficulties during a routine visit in the past 3 years (11.2% of men and 13.5% of women) but the majority of men (61.1%) and women (56.3%) thought that a doctor should routinely ask patients about their sexual function.

### Conclusions

Here, we have reported population-level data from middle-aged and older men and women in Canada concerning sexual activity, the prevalence of a number of sexual difficulties and associated help-seeking behaviors. The Canadian data set showed strong

TABLE 4. Attitudes concerning treatment of sexual problems by gender, Canada 2001–2002

	% (95% confidence interval)
<b>Men</b>	
<b>Reasons for not consulting a doctor about the experienced sexual problem*</b>	
Normal with aging/I am comfortable the way I am	77.1 (70.2, 83.1)
Did not think it was very serious/Waiting if problem goes away	56.3 (48.6, 63.8)
Doctor cannot do much/Do not think it is a medical problem	47.1 (39.5, 54.8)
Not comfortable talking to a MD/MD is a close friend/MD is the wrong gender	26.9 (20.4, 34.2)
Do not have a regular physician/Doctor is expensive	17.8 (12.4, 24.3)
Doctor uneasy to talk about sex	8.4 (4.8, 13.5)
<b>Have been asked by a doctor about possible sexual difficulties in a routine visit in the past three years†</b>	11.2 (8.6, 14.4)
<b>Think a doctor should routinely ask patients about their sexual function†</b>	61.1 (56.4, 65.6)
<b>Women</b>	
<b>Reasons for not consulting a doctor about the experienced sexual problem*</b>	
Normal with aging/I am comfortable the way I am	81.7 (75.9, 86.6)
Did not think it was very serious/Waiting if problem goes away	60.3 (53.5, 66.8)
Doctor cannot do much/Do not think it is a medical problem	50.2 (43.3, 57.1)
Not comfortable talking to a MD/MD is a close friend/MD is the wrong gender	31.2 (25.2, 37.8)
Do not have a regular physician/Doctor is expensive	20.4 (15.2, 26.4)
Doctor uneasy to talk about sex	7.1 (4.1, 11.2)
<b>Have been asked by a doctor about possible sexual difficulties in a routine visit in the past three years†</b>	13.5 (10.6, 16.8)
<b>Think a doctor should routinely ask patients about their sexual function†</b>	56.3 (51.7, 60.7)

\*Based on reports from respondents complaining of at least one sexual problem who have not consulted a doctor. †Based on all respondents. All prevalences are adjusted according to the age distribution of the total of sexually active men and women in Canada in this sample.

concurrence with the US and western European sexual behaviors with respect to sexual frequency, types of dysfunctions and lack of comfort in presenting to physicians for help.<sup>21-23</sup>

The large cross-national population sample and the use of a common method of data collection represent two major strengths of the GSSAB. In future analyses of the study database, these features will enable us to make valid comparisons between participating countries and regions. Face-to-face interviews were not used in the GSSAB, as they may cause respondents undue embarrassment when talking about personal and sensitive issues, and may make them feel obliged to give 'socially desirable' answers.<sup>25</sup> Only sexual problems that persisted with moderate to higher frequency were defined as 'dysfunctions'.<sup>26</sup> This approach is essentially equivalent to the use of two sequential screening tests, and greatly reduces the likelihood of false positive responses. It means, however, that the prevalence of sexual dysfunction may have been under-reported in the GSSAB in comparison with studies that used more sensitive, less specific, methods.

The overall response rate in Canada (approximately 10%) was low, while it is true that low completion rates can serve as a flag for the possibility of systematic biases in sample coverage, it by no means guarantees or necessitates it. The prevalence of self-reported health conditions such as smoking, hypertension, and diabetes in the GSSAB (these data are not shown here) was generally comparable with published values.<sup>27-30</sup> This suggests that refusal to participate in the study was probably due to a general disinclination to undergo a telephone interview, regardless of the subject matter, and it seems unlikely that this would have introduced a bias in the estimates of the prevalence of sexual behaviors and sexual disorders. It also indicates that the study population is likely to be generally representative of the Canadian population.

In the Canadian GSSAB sample, a diagnosis of depression was a significant correlate of erectile dysfunction in men and a lack of sexual interest and an inability to reach orgasm in women. Comorbidity between depression and male erectile dysfunction is known to be high and it seems likely that the relationship between the two conditions is bi-directional.<sup>31</sup> For, while the distress of erectile dysfunction may contribute to the development of depression, it is also possible that depression may play a causative role in male erectile difficulties. Depressive symptoms are also known to be associated with female sexual problems, including disorders of

sexual desire, arousal, and orgasmic function.<sup>32</sup> When considering the co-existence of depression and sexual disorders in men and women, the possible role of antidepressant treatments should also be considered. Sexual dysfunction is an acknowledged side effect of antidepressant therapy and the rates of dysfunction may vary between different classes of drugs.<sup>33-35</sup> Especially high rates (approximately 30% to 70%) of antidepressant-induced sexual dysfunction have been reported in patients treated with the selective serotonin reuptake inhibitors (SSRIs), sertraline and paroxetine and while men taking SSRIs appear to experience higher rates of sexual side effects, the dysfunction reported by women seems to be more severe.<sup>34,36,37</sup> The use of antidepressants - and especially of SSRIs - among older adults in Canada has increased substantially in recent years<sup>38</sup> and their impact on sexual functioning in this population should not be underestimated.

The results of the GSSAB indicated that not being bothered by the problem, or thinking that the problem was not severe or not medically treatable were the most common reasons why men and women in Canada had not raised the subject of their sexual difficulties with a doctor. The findings also showed that doctors in Canada rarely ask patients about their sexual health during a routine consultation, even though the majority of male and female respondents indicated that they would appreciate this sort of enquiry. A proactive stance by doctors significantly encouraged medical help-seeking for sexual problems in both men and women in the GSSAB. Untreated sexual problems can greatly impair the quality of life of the patient and their partner and it would be helpful if physicians - especially primary care physicians - would incorporate questions about sexual functioning into their routine patients consultations.<sup>39</sup> Provided the matter is handled sensitively, this could result in improved patient functioning and an enhanced physician-patient relationship.

Difficulties regarding access to or affordability of medical treatment were cited as reasons for not seeking medical help for sexual problems by about 20% of men and women in Canada. It has been reported previously that citizens of Canada with below average incomes are more likely than those with above average incomes to report problems with access to healthcare due to cost.<sup>40</sup> About 20% of men and 30% of women in the GSSAB Canadian sample had a low household income, it seems reasonable to propose that this factor may have influenced their decision not to seek medical help for their sexual problems.

In conclusion, the findings of this study indicate

that middle-aged and older men and women in Canada show continued sexual interest and activity, in spite of the presence of a number of sexual dysfunctions. Few of the individuals who experience sexual problems seek medical help; this appears to be largely due to a belief that the problem is not serious or not medically treatable and/or a lack of concern about the problem. Educational programs may help to increase patients' awareness and understanding of sexual problems and the various types of treatment that are available, while a more proactive approach by physicians would help to overcome potential barriers that patients may have in seeking help for their sexual difficulties. □

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