Family Practice

Vol. 15, No. 6
Printed in Great Britain

Sexual problems: a study of the prevalence and need for health care in the general population

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Dunn KM, Croft PR and Hackett GI. Sexual problems: a study of the prevalence and need for health care in the general population. *Family Practice* 1998; **15**: 519–524.

Background. There has been little research carried out on the prevalence and types of sexual dysfunction in the general population, although the indications are that such problems are relatively common. Most common sexual problems are potentially treatable. However GPs have estimated the prevalence of sexual problems to be far lower than survey estimates.

Objective. To provide an estimate of the prevalence of sexual problems in the general population, and assess the use of and need for professional help for such problems.

Methods. We used an anonymous postal questionnaire survey. The study was set in four general practices in England*, and the study population was a stratified random sample of the adult general population (n = 4000). The subjects were 789 men and 979 women who responded to the questionnaire. The main outcome measures were the presence and type of current sexual problems in men and women, and the provision and use of treatments for sexual problems.

Results. A response rate of 44% was obtained. The median age of the responders was 50 years. A third of men (34%) and two-fifths of women (41%) reported having a current sexual problem. The most common problems were erectile dysfunction (n = 170) and premature ejaculation (n = 88) in men; in women the most widely reported problems were vaginal dryness (n = 186) and infrequent orgasm (n = 166). In men, the proportion of responders reporting sexual problems increased with age, but there was no similar trend in women. Of those responders who reported a sexual problem, 52% said that they would like to receive professional help for this problem, but only one in ten of these people (n = 50) had received such help.

Conclusion. Among responders there was a high level of reported sexual problems. The most frequently reported problems (vaginal dryness, erectile problems) may be amenable to physical treatment in practice, and yet few had sought or received help. However, many said that they would like to receive help. These figures suggest that there may be an important burden of potentially reversible sexual problems in the general population.

Keywords. Cross-sectional studies, health surveys, impotence, prevalence, psychosexual dysfunctions.

Introduction

The British National Survey of Sexual Attitudes and Lifestyles (NATSAL),[1] published in 1994, has provided health services with relevant information about sexual relationships, but one of the remaining gaps is in material about problems with sex. Very few population-based surveys have been carried out on this subject,[2–7] and these have generally focused on a limited section or a small sample of the population. Much information has come from specialist clinic samples[8,9] and magazine surveys, which are likely to represent highly selective groups of people with sexual problems.

Published studies indicate that sexual problems are relatively common. For example, in Britain a prevalence of sexual problems of 33% was found in middle-aged women,[2] and in America a prevalence of impotence of

Received 15 March 1998; Accepted 21 July 1998.
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52% was estimated among men aged 40–70 years.[5] However, such problems often remain a hidden issue, with people reluctant to ask for help, and many professionals not realizing that such help is needed. Research in general practice in Australia has found that family doctors' estimates of the prevalence of sexual problems are much lower than survey estimates, ranging from 0.2 to 5% of the practice population.[10] Similarly, in America, family physicians have reported that 5.4% of their patients had a sexual dysfunction.[11]

Previous research has attempted to investigate the relative frequency of different sexual problems, with disparate results. The major problems for men range from premature ejaculation[4,12] to impotence[5] or inhibited desire,[3] whereas the main problems in women are quoted as being orgasmic dysfunction,[4] vaginal dryness[2] or inhibited desire.[3]

Clinical textbooks of sexual medicine claim that many sexual problems are treatable—some by organic approaches (injections of papaverine for male impotence for example), others by simple psychosexual techniques ('sensate focusing' for anorgasmia for example). Although much of this clinical evidence is not firmly rooted in scientific trial evaluation, the potential impact of such treatment on peoples' lives might be considerable—if it were sought and made available.

This study is the first large scale, systematic survey of sexual dysfunction in the adult general population. It seeks to estimate the prevalence of various sexual problems in the general population, and to investigate the use of treatments for such problems relative to the wishes of sufferers for assistance from the health services.

Method

Setting

Four general practices in England took part in the study during 1996. The general practices were diverse both in terms of geographical location within the country and in terms of urbanization, ranging from a village to a large urban area. Ethical approval was obtained from each of the relevant Local Research Ethics Committees.

Study population

The age–sex register from each practice was obtained and all people aged between 18 and 75 years were identified. From each practice register, a stratified random sample of 1000 people was selected, consisting of 86 men and women in each of the age groups 18–27, 28–37, 38–47, 48–57 and 58–67, and 70 men and women in the age group 68–75 years. The Epi-info package was used to generate the random numbers. For three of the four practices, a sample of 1200 was chosen in the first instance, which was forwarded to the partners at the practice for checking for recent deaths and to ensure that there were no people on the list for whom receiving the questionnaire would cause a serious problem. No more than 15 people were removed from the list at any one practice. The fourth practice considered their register sufficiently up-to-date to obviate the need for checking.

Questionnaire development

Using previous clinic based questionnaires on sexual problems, a questionnaire for use in this study was developed. The questionnaire was tested for sensitivity and comprehensibility among a group attending a sexual dysfunction clinic. A pilot study was then carried out in which 100 questionnaires were sent out to a random sample of a general practice population. Some questions were removed as a result of these two stages.

Questions were included regarding frequency of intercourse, sexual problems and the desire for and provision of help for sexual problems. The questions on erectile dysfunction were modified from the validated International Index of Erectile Function (IIEF) questionnaire.[13] Sexual problems were defined by one or more positive responses to a list of specific sexual problems. The questions used in the section on sexual relations are shown in the Appendix. Questions were also included to obtain items of demographic information.

The piloted questionnaire was then sent for self-completion to the selected study sample in each practice, together with a letter from the practice which emphasized the importance of the work and the anonymity of the questionnaire. A reply-paid envelope for the return of the questionnaire was included. The questionnaires for men and women were different with respect to the questions regarding sexual relationships. A reminder letter was sent to the entire sample approximately a week after the mailing of the initial questionnaire; non-responders could not be selected out owing to the anonymity of the questionnaire.

The data were entered into the Epi-info package. The social class of responders was calculated using the Office of National Statistics Standard Occupational Classification.[14] Prevalence figures and confidence intervals were calculated from the responses using the STATA statistical package.[15]

Results

Demography

Overall, 1768 responses to the questionnaire were received. This comprised 39% of the male sample and 49% of the females. The response rate from individual general practices ranged from 40 to 47%. There was no detailed information available about non-responders as the questionnaire was anonymous; the responders did, however, have a mean age of 49 years, which is slightly greater than that of the total study sample, at

TABLE 1 *Prevalence of questionnaire defined current sexual problems*

	Total responses	No. with problem	% with problem	95% CI
Men				
Difficulty getting erection	648	137	21	18–24
Difficulty maintaining erection	647	153	24	20–27
Erectile dysfunction[a]	650	170	26	23–30
Premature ejaculation	617	88	14	11–17
Inhibited enjoyment[b]	534	49	9	7–12
Any of above	691	235	34	30–38
Women				
Orgasmic dysfunction[c]	619	166	27	23–30
Dyspareunia	657	116	18	15–21
Vaginal dryness	655	186	28	25–32
Problems with arousal	621	103	17	14–20
Inhibited enjoyment[b]	620	110	18	15–21
Any of above	705	290	41	37–45

[a] Combination of difficulties in getting or maintaining an erection.
[b] A problem was recorded if making love was never or rarely a pleasant experience.
[c] A problem was recorded if a climax was never or rarely experienced.

47 years. The mean age of the female responders was 48 years; the male responders were slightly older, with a mean age of 51 years. Approximately three-quarters of responders were married (n = 1267), 28% of responders (n = 469) said that they had children under 18 years of age and 21% (n = 229) said that they lived alone. Three-quarters of the responders of working age were currently employed (n = 906), with 72% of employed female responders in non-manual occupations, compared with 53% of men. Ten per cent of men and 4% of women were in social class I.

Frequency of sexual intercourse

When asked about their frequency of sexual intercourse, one-third of responders (n = 557) reported that they had not had sex at all during the previous 3 months, and one-fifth reported having had sex more than once a week.

Current sexual problems

The frequency of sexual problems defined by the questionnaire is shown in Table 1. Thirty-four per cent of men and 41% of women reported having had one or more sexual problem(s) during the previous 3 months. The main current problem in men was erectile dysfunction, with one in five men (26%, n = 170) reporting this; in addition, one in eight men (14%, n = 88) reported having experienced premature ejaculation during the preceding 3 months. The most common current problems in women were vaginal dryness (28%, n = 186) and orgasmic dysfunction (27%, n = 166). Women were more than twice as likely as men to report that sexual intercourse was never or rarely a pleasant experience [110 women (18%) and 49 men (9%)].

Lifetime sexual problems

As well as the current sexual problems, responders were also asked to report whether they had ever had problems with sex. The results are shown in Table 2. The pattern of these 'lifetime' problems was similar to that of current sexual problems. Overall, 54% of men and 68% of women reported ever having had a sexual problem. In men, the most common sexual problem over their lifetime was erectile problems (39%, n = 265), followed by premature ejaculation (31%, n = 190). For women, vaginal dryness (49%, n = 353) was slightly more common than dyspareunia (45%, n = 333).

Wish and need for professional help

Nearly half of the male responders to the survey (49%, n = 281) and 39% (n = 293) of female responders reported that they would like to receive help for sexual problems. These figures comprise 64% of men and 44% of women who reported a sexual problem.

Only a small proportion of those people who wished for help had actually received it; 6% (n = 41) of male and 4% (n = 35) of female responders had received help, comprising only 12% of the men and 8% of the women who said that they would like help. Men who reported a problem were twice as likely to have received

TABLE 2 *Prevalence of questionnaire defined lifetime sexual problems*

	Total responses	No. with problem	% with problem	95% CI
Men				
Difficulty getting erection	602	139	23	20–27
Difficulty maintaining erection	595	149	25	22–29
Erectile dysfunction[a]	685	265	39	35–42
Premature ejaculation	618	190	31	27–34
Any lifetime problem[b]	726	393	54	51–58
Women				
Dyspareunia	736	333	45	42–49
Vaginal dryness	727	353	49	45–52
Any lifetime problem[b]	809	553	68	65–72

[a] Combination of difficulties in getting or maintaining an erection.
[b] A problem was recorded if there was any current or lifetime sexual problem.

TABLE 3 *Preferences for professional help with sexual problems; figures are numbers (percentages[a]) of responders*

	Men	Women
Family doctor	319 (43)	296 (35)
Trained marriage guidance counsellor	74 (10)	129 (15)
Trained sex therapist	265 (36)	301 (36)
Psychiatrist	47 (6)	44 (5)
Family planning or well-(wo)man clinic	151 (20)	379 (45)
No opinion	203 (27)	176 (21)

[a] Percentages will not add up to 100 as responders were allowed indicate more than one choice.

help than were women with such a problem (14 and 7%, respectively). When asked from whom they had received the help, the most common response was the GP (63%, $n = 46$); four men had been to a urology department, three women had been to a family planning clinic, two men and one woman had been to Relate (marriage guidance), one woman had been to a psychiatrist and one man had seen a sexual therapist.

Given five options of sources of professional help, the most common choice was the family doctor followed by the trained sex therapist, with lower proportions specifying a marriage guidance counsellor or a psychiatrist. There were striking differences between the preferences of men and women (Table 3); the most popular choice for women was the family planning clinic rather than the family doctor, the latter being the first choice for men. Furthermore, the majority of women (54%) said that they would prefer the help to be from a female professional, compared with only 24% of men preferring help from a male professional.

Discussion

This is the first full population survey of the extent and nature of sexual problems in the adult general population. We have shown that sexual problems are common in both men and women, with 34% of men and 41% of women reporting sexual problems. The most prevalent problems were erectile problems in men (26%) and vaginal dryness in women (28%). Only a small proportion of responders had received help for sexual problems (64% of men and 44% of women with a sexual problem), although a large number of people wished for professional help with such problems.

Asch *et al.* carried out a survey of postal questionnaires published in 1991, and found a mean response rate of 59% (SD 20%).[16] They also found that response rates were significantly lower in anonymous surveys and those with a sensitive topic area, and that a personalized reminder to individual non-responders could increase this by 10% or more. This suggests that the response rate in this study was reasonable given the nature of the survey. The only information directly available about non-responders was their mean age and their sex, and these differed little from those of the responders. It is conceivable that people might have been more or less likely to reply if they had one of the problems mentioned in the survey. However, the results still show that sexual problems are common, even if people with such a problem are more likely to reply than people without. Furthermore, if all the people in

the population who wanted help with such a problem were identified by the survey, then this would indicate that, in an average practitioner's list with 1500 adults, the minimum number with a sexual problem who would like to receive help is 90 adults.

We considered further the representativeness of responders by comparing their demographic characteristics and their reported level of some sexual dysfunctions with information from other sources. A comparison of the marital status of responders in this survey with responders to the General Household Survey (GHS) (1990)[17] indicates that responders to the current survey were broadly similar to those in the GHS, although they were less likely to be single and more likely to be widowed. The proportion of responders in non-manual occupations was slightly higher in this survey than in the GHS.

Results from subsections of the responders were compared with results from other studies of sexual problems, and the results were generally consistent. For example, in a study of women in Oxford aged 30–59 years, a prevalence of sexual problems of 33% was detected;[2] a comparable subset from this study would give a prevalence of 28% (95% CI 23–32%). A study in the USA gave a prevalence of moderate or complete impotence of 35% for men aged 40–70 years;[5] the equivalent figure here is 30% (95% CI 25–35%). An Israeli study also using self-completion questionnaires gave an overall prevalence of sexual problems of 49%,[4] compared with the figure of 38% (95% CI 35–40%) in this study.

In summary, in so far as it is possible to compare these results with other data, our survey responders appear to be representative of the adult population.

Another problem is the possibility of false responses. Research has found responders in sexual surveys to be honest where "(1) they see a good reason for revealing such intimate information, (2) they can trust the recipient to treat it with respect and confidentiality".[18] As indicated in NATSAL, there is no more reason to believe that people have not told the truth in a survey of sexual practices than in any other study of human behaviour.[1]

Our study has shown that a large proportion of people would like to receive professional help for their sexual problems. Patients and their doctors may have different perceptions about the best sources of help. GPs may have easier access to counselling services, whereas our survey shows that patients themselves would prefer the trained sex therapist or family planning services. Only a small proportion of people have actually received help for sexual problems. There are many possible reasons for this. It is unlikely that the low levels of help reflect a lack of available treatments, but lack of knowledge about these treatments or of confidence in their effectiveness may be important barriers. One reason may lie with health professionals. It has been shown that family doctors probably underestimate the prevalence of sexual problems,[10,11] which may reflect a lack of realization that the problems exist, a reluctance to broach the subject of sexual problems with a patient or an awareness of inadequate specialist services for referral. Another reason for the low level of service usage may lie with patients' reluctance to approach the health services with such problems, or their lack of awareness that there may be treatments available for sexual problems. It is most probable that there is a combination of these factors in play, but whatever the reason, it appears that there is need that could potentially be met through a GP's intervention.

The prevalence of sexual problems in the general population is relatively high, and many people would actually like help for such problems. There is, therefore, a significant gap between the provision and use of treatments for sexual problems, and the need or desire for these treatments.

Appendix

(1) Over the past three months, how often have you had sexual intercourse? Never/less than once a week/once a week/two to three times a week/more than three times a week.
(2) On what proportions of the occasions that you made love, in the past three months, did you find it a pleasant experience? Never/rarely/often/always.

Women:

(3) On what proportions of the occasions that you made love, in the past three months, did you have a problem being sexually aroused by your partner? Never/rarely/often/always.
(4) On what proportions of occasions that you made love, in the past three months, did you experience a climax? Never/rarely/often/always.
(5) Have you experienced pain or discomfort during sex in the past three months/ever?
(6) Have you experienced vaginal dryness in the past three months/ever?

Men:

(7) Have you had trouble getting an erection in the past three months/ever?
(8) Have you had trouble maintaining an erection in the past three months/ever?
(9) Have you had difficulty with ejaculating prematurely in the past three months/ever?

All:

(10) Have you ever sought any professional help for a sexual problem?

(11) If help were available for sexual problems, would you like this help?
(12) Who, in your opinion should provide help with sexual problems? Your family doctor/trained marriage guidance counsellor/trained sex therapist/psychiatrist/family planning or 'well (wo)man' clinic/no opinion.
(13) Would you like the person giving the help to be a man or a woman?

Acknowledgements:

We thank the partners, staff and patients from all of the practices involved in the study.

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