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Sexual Function, Delivery Mode History, Pelvic Floor Muscle Exercises and Incontinence: A Cross-sectional Study Six Years Postpartum.

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Sexual Function, Delivery Mode History, Pelvic Floor Muscle Exercises and Incontinence: A Cross-sectional Study Six Years Postpartum.

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ABSTRACT

Background: There is controversy over the effect of mode of delivery, pelvic floor muscle exercises (PFME), incontinence and sexual function.

Aim: To investigate the relationship of sexual function with delivery mode history, pelvic floor muscle exercises and incontinence.

Methods: This was a cross sectional postal survey of women, six years post partum, who had given birth in maternity units in Aberdeen, Birmingham and Dunedin and had answered a previous questionnaire. Each sexual function question was analysed separately by ANOVA.

Results: At six years post index delivery 4214 women responded, of whom 2765 (65%) answered the optional ten sexual function questions. Although there was little association between delivery mode history and most sexual function questions, women who had delivered exclusively by caesarean section scored significantly better on the questions relating to their perception of vaginal tone for their own (p value <0.0001) and partner's (p value 0.002) sexual satisfaction, especially when compared with women who had had vaginal and instrumental deliveries. Women who reported that they were currently performing PFME scored significantly better on seven questions. Women with urinary or faecal incontinence scored significantly poorer on all sexual function questions.

Conclusions: Mode of delivery history appeared to have minimal effect on sexual function. Current PFME performance was positively associated with most aspects of sexual function, however all aspects were negatively associated with urinary and faecal incontinence.

INTRODUCTION

The prevalence of sexual dysfunction is largely unknown, and likely to be under reported, but it is estimated to affect 30% to 50% of the general population^{1,2}. The aetiology of female sexual dysfunction is multifactorial with both organic and psychological factors. Studies have shown that many women experience short term postpartum sexual problems, those being most at risk are the women who have undergone an assisted vaginal delivery³. Also pelvic floor disorders such as urinary incontinence and pelvic organ prolapse have been reported to affect sexual function⁴⁻⁶.

Pelvic floor muscle exercises (PFME) have been shown in a small number of studies to improve orgasmic potential in non-orgasmic women with poor pelvic muscle tone^{7,8}, and more recently to improve sexual desire, performance and achievement of orgasm⁹. However, the theory that increased pelvic muscle tone causes increased congestion and lubrication of the pelvic area, which may in turn improve the quality of sexual sensation, has been debated in the past and some studies have concluded no positive relationship between pelvic muscle strength and sexual satisfaction¹⁰⁻¹².

There is very little published information evaluating the long term data on the relationships between the mode of delivery, PFME, urinary incontinence and sexual function and no studies have examined delivery mode history. However, short term data regarding sexual function suggest high rates of postpartum sexual problems,

mostly dyspareunia and loss of sexual desire¹³⁻¹⁶. Using a sample of women followed up 6 years after an index delivery we investigated the relationship of sexual function with delivery mode history and also with current PFME and incontinence.

METHODS

All women (10,985) who delivered during a one year period (between January 1994 and March 1995) in 3 maternity units (Aberdeen in Scotland, Birmingham in England and Dunedin in New Zealand) were mailed a postal questionnaire at 3 months postpartum enquiring about the prevalence of both urinary and faecal incontinence. This delivery is called the 'index delivery' as some of the women had had a previous birth. The questionnaire was designed by the study team since at the time there were no suitable validated questionnaires. Information regarding urinary and faecal incontinence along with the performance of PFME was collected. Question wording and definitions were as previously published¹⁷. Of the seven thousand eight hundred and seventy-nine (7879) women who responded to this questionnaire, 2633 stated they had urinary incontinence and 747 (28%) of these women were invited to participate in a randomised controlled trial comparing a program of PFME training post delivery with a standard care control group. The intervention involved a nurse/incontinence specialist teaching PMFE (and if required bladder training for urgency symptoms) at 5, 7 and 9 months postpartum and then a follow-up assessment at 12 months¹⁸.

A second postal questionnaire was sent 6 years after the index delivery to all 7879 women who had responded to the original questionnaire, ascertaining later symptoms using the same questions and including an additional section on sexual function. Further attempts were made to contact non-responders. In Aberdeen and Birmingham these further attempts did not include the sexual function questionnaire as it was thought that to do so may lower the response rate. There were ten questions based on the Golombok Rust Inventory of Sexual Satisfaction (GRISS) (19) related to sexual function (see Tables). These were scored on a 5 point Likert scale [Never/Not at all/Not adequate = 1, Hardly ever/A little/Less than adequate = 2, Occasionally/Some/Adequate = 3, Usually/A lot/More than adequate = 4, Always/Very/ Very adequate = 5]. Because of the phrasing of the question sometimes 1=good and 5=bad and sometimes the other way around. A complete obstetric history, including details of all their deliveries, was obtained from the women by questionnaire. Obstetric and maternal data relevant to the index delivery only were additionally obtained from the hospital case notes or computerised records. The initial and follow up studies were approved by the ethics committees in all three centres.

Research questions

The main research question was whether there is a relationship between the mode of delivery history and sexual function. Each sexual function question was analysed separately and compared for each type of delivery history.

The secondary research question was to investigate whether current pelvic floor muscle exercise (PFME) performance and urinary and faecal incontinence were associated with better sexual function. Again, each of the ten questions on sexual function were analysed separately.

Statistical analysis

Statistical analysis was performed using STATA v9 and for analysis purposes the delivery mode histories were categorised into four groups: spontaneous vaginal deliveries only (SVD), any combination of vaginal deliveries and caesarean sections (SVD & CS), any assisted vaginal delivery (AVD) which included forceps, vaginal breech and ventouse deliveries, and caesarean section (CS) deliveries only. The sexual function questions were treated as if they were continuous and analysed by a 3-way analysis of variance for each question with mode of delivery history, PFME and incontinence as factors. Extra analysis of variance models were run that included interaction terms between PFME and incontinences (both urinary and faecal), and some models adjusted for parity as well.

RESULTS

Seven thousand eight hundred and seventy-nine (7879) women replied to the postal questionnaire at 3 months postpartum. Excluding known deaths, a total of 7872 women were sent questionnaires at 6 years. A response rate of 54% (4214/7872) was achieved. Comparisons using index delivery data of the non-respondents and respondents at six years showed that more non-respondents were Asian (10% vs

4.7%, $p < 0.001$), under 25 years old (32% vs 18%, $p < 0.001$) and had a higher rate of faecal incontinence at three months (10.5% vs 5.6%, $p < 0.017$). The rates of urinary incontinence and mode of index delivery were similar^{20,21}.

Of the four thousand two hundred and fourteen (4214) respondents 65% (2765/4214) answered the optional questions on sexual function — this was 35% (2765/7872) of the total cohort. The characteristics of both the respondents that answered the sexual function questions, and those who chose not to, were similar with regards to age (a mean age of 35 years old), parity (a mean parity of 2.4), mode of delivery history and faecal incontinence. However, there were small but significant differences with regards to PFME and urinary incontinence, as slightly more of the respondents to the sexual function questions were performing PFME and were incontinent of urine. Of the women who responded to the sexual function questions, 17.5% (484) selected the most adverse option to one or more of the questions, suggesting a severe problem in at least one area of sexual function.

Obstetric factors and sexual function

Delivery histories were available for all but 6 women who completed the sexual function questions. The type of delivery history appeared to have a minimal association with most aspects of sexual function (Table 1). However, women who had deliveries exclusively by caesarean section rated their vaginal tone as significantly better for their own and their partner's satisfaction when compared with the SVD only and any AVD groups (p value = 0.002/0.01 and $<0.0001/0.002$, respectively), but

there were no significant differences when compared with the mixed SVD and CS group (p value = 0.364/0.501). These results did not alter significantly when adjusted for parity, current PFME, urinary and faecal incontinence.

Current PFME performance and sexual function

Women reporting current performance of PFME scored significantly better on 7 out of 10 questions, apart from the questions regarding pain during intercourse, urinary incontinence interfering with their sex life and vaginal tone for their partner's satisfaction, shown in Table 2. The differences with PFME were not as large as those with continence status, which are displayed in Table 4.

Of the 747 women who were recruited to the RCT, 388 of them replied to the sexual function questions, of whom 192 had been allocated to the intervention arm. To consider any possible effects that the women in the RCT (especially those in the intervention arm) may have on the results of this study the analysis was repeated excluding these trial participants. The repeat analysis showed that exclusion of the RCT participants, regardless of intervention or control arm, did not alter the results. Separate analysis of only the RCT respondents is displayed in Table 3 and shows no significant differences in any of the sexual function question responses between the two trial groups (intervention and control).

Urinary incontinence and sexual function

Women complaining of urinary incontinence scored significantly poorer than women without this symptom on all 10 sexual function questions [Table 4]. The analysis of variance including the interaction term showed that urinary incontinence and PFME appeared to be independently associated with the scores of 8 out of 10 sexual function questions, that is the interaction term was not statistically significant for these questions. The two questions which did demonstrate a statistically significant interaction between incontinence and PFME were pain with intercourse and difficulty with arousal. The continent women performing PFME had fewer reports of pain with sexual intercourse than those not performing PFME. However, this difference was not seen in the incontinent women as those performing PFME reported slightly more pain during intercourse than those not performing the exercises. Both continent and incontinent women who performed PFME had higher scores on the sexual arousal question (suggesting that they are more easily aroused). However, the difference associated with performing PFME in continent women was much greater than that in the incontinent women.

Faecal incontinence and sexual function

Women complaining of faecal incontinence scored poorer on all of the sexual function questions than those without this symptom (Table 5). There were no interactions between faecal incontinence and PFME, suggesting that they have independent effects on sexual function.

DISCUSSION

This study has shown that although women who delivered exclusively by caesarean section scored significantly better on questions relating to their perception of vaginal tone for their own and partner's sexual satisfaction when compared with women who had had only vaginal deliveries or instrumental deliveries, there were no differences in all the other aspects of their sexual function.. Women who reported that they were currently performing PFME scored significantly better on 7 out of 10 questions, whereas women incontinent of urine or faeces scored significantly worse on all of the sexual function questions.

Strengths and weaknesses

The main strengths of this study are the size of the population, the length of time from the index delivery and the completeness of the obstetric histories. With any long term study there is a drop off with time and this population is no exception, with only 35% of the original responders answering the sexual function questionnaire.. This meant that after categorising the mode of deliveries the numbers available in each group to answer the research question were reduced, especially in the Caesarean section only and mixed SVD & CS groups. A low response rate is associated with bias in estimates of prevalence, but the effect on associations is usually less pronounced.

A weakness of this study is that the obstetric data from subsequent deliveries relied on maternal recall and was obtained from the questionnaire, although for the index deliveries, for which we had both questionnaire and hospital note data, the discrepancies were small²⁰. It is, however, possible that there were some errors in the obstetric data given in the questionnaires. The collection of delivery mode histories in

this study can also be seen as a strength, as all other studies have only used a single mode of delivery.

This study did not use a validated sexual health questionnaire, as at the time of the study design there was none available which were suited to looking at relationships with mode of delivery and incontinence and the study team modified the sexual function questions in the 'GRISS' (19). The second problem with the sexual function questions used was the fact that they were optional and there was no 'Not applicable' option for women not currently sexually active or a chance to state reasons why they did not wish to answer the questions. This may account for a small proportion of the non-response rates to these questions.

Prevalence and severity of sexual dysfunction problems

The ten sexual function questions attempted to cover the four areas of desire, arousal, orgasm and satisfaction²². As these were optional questions 35% of the women who responded to the 6 year follow-up questionnaire chose not to answer the sexual function questions. There were no differences between those who did and did not answer these questions in relation to their delivery mode histories, parity or age but it is not known whether the non-responders were more or less likely to have sexual dysfunction. Women who chose not to answer the questions may have seen themselves as not having any problems with sexual function, or they may not have been currently sexually active. If the first reason was mainly the case then this study will be over estimating the prevalence of sexual dysfunction. However, as the questionnaire asked the women to consider the preceding few months when

questioned about sexual function, it may also be the case that many women were not sexually active over that period and therefore felt unable to answer the questions.

Bancroft et al (2003) in a general population survey specifically excluded women who were not sexually active: of the remaining women, 24.4% were markedly distressed about their own sexuality or sexual relationship²³.

In this study each sexual function problem was examined separately and was not based on a validated sexual function scale so no overall aggregated sexual dysfunction score was created. Of the women answering the sexual function questions we categorised those who responded that they had a severe problem with at least one element of sexual function which amounted to 17.5% of the sample. This is not too dissimilar to the 24.4% of sexually active women who were markedly distressed about their own sexuality in the above mentioned study by Bancroft et al²³. However, within our present study there was no inquiry as to whether or not these 'severe problems' actually caused the women any distress, so the women may not have perceived themselves as having sexual dysfunction.

Relationship with obstetric variables

This study has shown a minimal relationship between the mode of delivery history and sexual function. Only the women's perception of their vaginal tone for their own and partner's satisfaction scored differently across the four delivery groups. The results suggest that any history of vaginal delivery may be related to poorer vaginal tone, however, the lack of significant difference between the CS only and the mixed (SVD and CS) group may be due to the small sample sizes. A study by Baytur et al²⁴,

found no difference in all aspects of sexual function (desire, arousal, lubrication, orgasm and pain) among groups of women who had a vaginal or caesarean section deliveries. However in this small study the vaginal delivery group did show lower pelvic floor muscle strength. Another study, by Connolly et al¹⁴, has shown no relationship between mode of delivery and sexual function with regard to persistent anorgasmia and pain. This is again a relatively small study with only 77 women at 24 weeks postpartum and it mainly focused on the resumption of postpartum sexual intercourse. A previous review of this evidence by Hicks et al³, suggested an association between assisted vaginal delivery and an element of sexual dysfunction. Most of the six reviewed studies reported a greater risk of perineal pain and delay in sexual intercourse resumption among women who had had an assisted vaginal delivery. However, the studies tended to be retrospective cohorts and measured only short-term, maximum 18 months, postpartum outcomes related to a single delivery.

Relationship with PFME

This study has shown that women currently performing PFME have better scores on the majority of the sexual function questions with the exception of pain on sexual intercourse, vaginal tone for partner's satisfaction and urinary incontinence interfering with intercourse. It may be that the women who are performing PFME as a treatment for their urinary incontinence, but are not having success with this treatment, find that their urinary incontinence is more of a problem than their sexual dysfunction.

Despite the suggestion that pelvic floor muscle training is thought to positively affect a women's sexual function there is very little evidence to support this. Statistical

association should not be taken as evidence of causation. Studies in this area have concentrated on women with urinary incontinence, tend to have small numbers and no good control group²⁵. A study by Beji et al⁹ suggested that PFME in women with urinary incontinence showed an improvement in sexual desire and orgasmic achievement, but no difference was found in sexual arousal. In our study, women who were performing PFME scored better on all aspects of sexual desire, orgasm and arousal when compared with women not currently performing PFME. However, when the incontinent women were analysed separately, women performing PFME didn't show significantly better arousal scores: this is in agreement with the study by Beji et al⁹.

In a sub-group of 388 women with postnatal urinary incontinence who had participated in a randomised controlled trial of PFME six years previously^{17,26} there was no evidence of difference in long term sexual function outcomes (Table 3). The numbers of women enrolled were too few for this finding to be statistically reliable, however, nor did the intervention have lasting effects on urinary incontinence (76% versus 79% of the controls were still incontinent) or the performance of pelvic floor exercises (50% in both groups). The effects of PFME on sexual function in women without urinary incontinence remain untested by randomised controlled trial.

Relationship with continence status

It is well documented that there is a relationship between urinary incontinence and sexual dysfunction^{4-6,27}. The results of this study agree with previous findings and suggest an association between urinary incontinence and pain on sexual intercourse,

decreased sexual arousal, poorer sexual satisfaction, problems with orgasm and vaginal lubrication. All ten of the sexual function questions were scored poorer by women who reported urinary incontinence. Sexual pain seems to be particularly prevalent in incontinent women, with 44% of patients reporting this in a recent study by Salonia et al²⁷.

There are numerous mechanisms postulated to explain why urinary incontinence may contribute to sexual dysfunction. These range from the psychological fear or anxiety of incontinent episodes occurring during sexual intercourse, thus reducing satisfaction, desire and arousal, to more mechanical causes leading to increased sexual pain. This study showed that women incontinent of urine and currently performing PFME reported slightly more problems with sexual pain than those not performing PFME. This may be because the women performing PFME have stronger muscles and as they are apprehensive about urinary leakage during intercourse they may have a type of vaginal spasm/ hypertonic pelvic floor contraction in anticipation of the incontinent episode, thus leading to more discomfort or pain. Conversely, the current study findings also suggested that women who are performing PFME and continent of urine tend to have less sexual pain.

This study has shown that faecal incontinence had a similar association with sexual function as did urinary incontinence. This is not surprising as both types of incontinence can cause an element of psychological distress and for this reason their similar associations with sexual function may have been predicted. The majority of research in this area has studied sexual function and faecal incontinence as outcomes following bowel surgery²⁸ and are not comparable with this study's findings.

Conclusions

Delivery mode history appears to have minimal effect on sexual function, with the exception of women's perception of vaginal tone for satisfaction being better in the Caesarean section only group when compared with women who have had at least one other delivery by the vaginal route. This study does not support the use of Caesarean section to protect sexual function.

Current PFME performance has a positive association with most aspects of sexual function, however urinary and faecal incontinence have a greater adverse relationship with all aspects of sexual function.

Future studies investigating the relationship between mode of delivery and sexual function are needed in unselected samples as there is a lack of large, longer term postpartum studies using validated sexual health measures. It is also important to research the effect of PFME on sexual function in both continent and incontinent women using an appropriate study design such as a randomised controlled trial.

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**Table 1. Sexual function outcomes according to mode of delivery history group
[mean scores of the rating for the sexual function]**

Sexual Function Questions	Mean (standard deviation)				Overall analysis of variance (p value)
	SVD only n = 1419	Mixed SVD & CS n = 219	Any AVD n = 852	CS only n = 269	
Desire					
Do you feel uninterested in sex?	3.00 (0.87)	2.99 (0.98)	3.07 (0.90)	3.04 (0.91)	0.376
Arousal					
Do you become easily sexually aroused?	3.63 (0.82)	3.57 (0.88)	3.53 (0.87)	3.58 (0.88)	0.081
Do you feel moisture or lubrication during sexual activity?	4.18 (0.87)	4.12 (0.94)	4.14 (0.87)	4.08 (0.86)	0.266
Orgasm					
Are you able to experience orgasm with your partner?	3.83 (1.01) n = 1410	3.87 (1.05)	3.78 (1.08) n = 845	3.80 (1.05)	0.505
For some women both the vagina and clitoris are important for sexual pleasure. How important for you at present are the vaginal feelings?	3.75 (1.10) n = 1403	3.63 (1.25)	3.65 (1.19) n = 835	3.77 (1.09)	0.107
Satisfaction					
Do you find your sexual relationship with your partner satisfactory?	4.12 (0.83)	4.12 (0.90)	4.03 (0.86)	4.10 (0.82)	0.130
How adequate do you think your vaginal tone is for your own satisfaction?	3.21 (0.99) n = 1391	3.28 (1.05) n = 218	3.17 (1.09) n = 830	3.46 (1.02)	0.0005
How adequate do you think your vaginal tone is for your partner's satisfaction?	3.45 (0.97) n = 1391	3.52 (0.96) n = 217	3.41 (1.02) n = 822	3.66 (0.98)	0.004
Other					
Do you ever have pain with sexual intercourse?	1.81 (0.94)	1.78 (0.95)	1.83 (0.97)	1.94 (1.00)	0.200
Does urinary incontinence interfere with your sex life?	1.18 (0.53) n = 1401	1.12 (0.39)	1.19 (0.58) n = 842	1.15 (0.51)	0.349

Table 2 Sexual function outcomes according to current pelvic floor muscle exercise (PFME) performance [mean scores of the rating for the sexual function]

Sexual Function Questions	Currently performing PFME Mean (standard deviation)		p value
	No (n = 1536)	Yes (n = 1220)	
Desire			
Do you feel uninterested in sex?	3.08 (0.90)	2.96 (0.88)	0.0003
Arousal			
Do you become easily sexually aroused?	3.53 (0.87)	3.67 (0.82)	<0.0001
Do you feel moisture or lubrication during sexual activity?	4.08 (0.92)	4.25 (0.82)	<0.0001
Orgasm			
Are you able to experience orgasm with your partner?	3.76 (1.08)	3.89 (0.98)	0.0007
For some women both the vagina and clitoris are important for sexual pleasure. How important for you at present are the vaginal feelings?	3.67 (1.18)	3.76 (1.08)	0.041
Satisfaction			
Do you find your sexual relationship with your partner satisfactory?	4.04 (0.88)	4.15 (0.81)	0.001
How adequate do you think your vaginal tone is for your own satisfaction?	3.19 (1.03)	3.27 (1.04)	0.041
How adequate do you think your vaginal tone is for your partner's satisfaction?	3.45 (0.99)	3.49 (0.98)	0.280
Other			
Do you ever have pain with sexual intercourse?	1.84 (0.95)	1.82 (0.96)	0.567
Does urinary incontinence interfere with your sex life?	1.17 (0.53)	1.18 (0.54)	0.580

Table 3 Sexual function outcomes according to allocation in randomised controlled trial of pelvic floor muscle exercises [mean scores of the rating for the sexual function]

Sexual Function Questions	Mean (standard deviation)		p value
	Intervention Group (n=192)	Control Group (n=196)	
Desire			
Do you feel uninterested in sex?	3.13 (0.83)	3.07 (0.92)	0.479
Arousal			
Do you become easily sexually aroused?	3.57 (0.80)	3.55 (0.81)	0.741
Do you feel moisture or lubrication during sexual activity?	4.07 (0.91)	4.23 (0.79)	0.061
Orgasm			
Are you able to experience orgasm with your partner?	3.74 (1.01)	3.85 (1.01)	0.315
For some women both the vagina and clitoris are important for sexual pleasure. How important for you at present are the vaginal feelings?	3.64 (1.15)	3.70 (1.10)	0.618
Satisfaction			
Do you find your sexual relationship with your partner satisfactory?	3.99 (0.82)	4.04 (0.84)	0.624
How adequate do you think your vaginal tone is for your own satisfaction?	2.95 (1.02)	3.03 (0.97)	0.440
How adequate do you think your vaginal tone is for your partner's satisfaction?	3.23 (1.06)	3.21 (0.92)	0.788
Other			
Do you ever have pain with sexual intercourse?	1.93 (0.91)	1.90 (0.94)	0.753
Does urinary incontinence interfere with your sex life?	1.31 (0.72)	1.31 (0.70)	0.964

Table 4 Sexual function outcomes according to urinary incontinence at 6 years
[Mean scores of the rating for the sexual function]

Sexual Function Questions	Urinary Incontinence Mean (standard deviation)		p value
	No (n =)1460	Yes (n = 1305)	
Desire			
Do you feel uninterested in sex?	2.94 (0.90)	3.12 (0.89)	<0.0001
Arousal			
Do you become easily sexually aroused?	3.68 (0.84)	3.49 (0.85)	<0.0001
Do you feel moisture or lubrication during sexual activity?	4.22 (0.84)	4.08 (0.91)	0.0001
Orgasm			
Are you able to experience orgasm with your partner?	3.90 (0.99)	3.72 (1.09)	<0.0001
For some women both the vagina and clitoris are important for sexual pleasure. How important for you at present are the vaginal feelings?	3.80 (1.11)	3.61 (1.16)	<0.0001
Satisfaction			
Do you find your sexual relationship with your partner satisfactory?	4.19 (0.81)	3.98 (0.88)	<0.0001
How adequate do you think your vaginal tone is for your own satisfaction?	3.44 (0.99)	2.98 (1.02)	<0.0001
How adequate do you think your vaginal tone is for your partner's satisfaction?	3.65 (0.95)	3.26 (0.98)	<0.0001
Other			
Do you ever have pain with sexual intercourse?	1.74 (0.92)	1.93 (0.99)	<0.0001
Does urinary incontinence interfere with your sex life?	1.07 (0.36)	1.29 (0.66)	<0.0001

Table 5 Sexual function outcomes according to faecal incontinence at 6 years
[Mean scores of the rating for the sexual function]

Sexual Function Questions	Faecal Incontinence Mean (standard deviation)		p value
	No (n = 2431)	Yes (n = 265)	
Desire			
Do you feel uninterested in sex?	3.01 (0.89)	3.21 (0.91)	0.0005
Arousal			
Do you become easily sexually aroused?	3.62 (0.84)	3.36 (0.91)	<0.0001
Do you feel moisture or lubrication during sexual activity?	4.17 (0.86)	4.03 (0.98)	0.011
Orgasm			
Are you able to experience orgasm with your partner?	3.85 (1.03)	3.57 (1.10)	<0.0001
For some women both the vagina and clitoris are important for sexual pleasure. How important for you at present are the vaginal feelings?	3.73 (1.13)	3.58 (1.17)	0.044
Satisfaction			
Do you find your sexual relationship with your partner satisfactory?	4.12 (0.83)	3.81 (0.97)	<0.0001
How adequate do you think your vaginal tone is for your own satisfaction?	3.25 (1.02)	2.98 (1.06)	0.0001
How adequate do you think your vaginal tone is for your partner's satisfaction?	3.48 (0.98)	3.27 (1.03)	0.001
Other			
Do you ever have pain with sexual intercourse?	1.79 (0.94)	2.18 (1.06)	<0.0001
Does urinary incontinence interfere with your sex life?	1.14 (0.48)	1.47 (0.82)	<0.0001

