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A – Study Design
B – Data Collection
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STRATEGIES FOR COPING WITH STRESS URINARY INCONTINENCE IN WOMEN

Mariola Bidzan^{1(A,B,C,D,E,F,G)}, Jerzy Smutek^{2(A,B,C,D,E,G)}

¹ Institute of Psychology, University of Gdansk

² Gynecology Clinic, Medical University of Gdańsk

SUMMARY

Background

Urinary incontinence during intercourse occurs in 10-56% of women suffering from urinary incontinence. Many strategies are used to cope with this problem.

Material/ Methods:

We investigated the impact of urinary incontinence during intercourse on the sexual life of 186 women suffering from stress urinary incontinence. Urinary leakage during sexual intercourse was reported by 140 women (75.27%). Changes in sexual function were grouped into four types of coping strategies based on the severity of restrictions on sexual life. We compared the coping styles used by women who limit sexual activity because of urinary leakage alone (GM), and women limiting activity for other reasons (IP).

Results:

Urinary leakage was significantly less often ($p < 0.01$) the reason for limitation of sexual life (complete or significant restriction) than other factors. If urinary leakage during intercourse was the only reason for significant limitation of sexual activity, the women used less restrictive strategies and seemed to care more about their partners' sexual satisfaction, compared to the other group. 18 women (12.86%) suffering from urinary leakage during intercourse reported no change in overall sexual functioning.

Conclusions:

Women for whom urinary incontinence during sex was the only cause of changes in sexual functioning were more likely to make an extra effort to satisfy their partners sexually than women for whom urinary incontinence was one of many causes of sexual dysfunction. In women with urinary incontinence, it was more probable that changes in sexual functioning have been brought on by factors other than urinary incontinence.

Key words: *sexual functioning, marital relationship, quality of life*

INTRODUCTION

Urinary incontinence (UI) is a social problem which affects around 16 to 60% of women (Rechberger-Jakowicki, 2005; Shaw, 2002; Bidzan, 2008). A substantial number of women afflicted with urinary incontinence are sexually active. Urinary leakage during intercourse occurs in 10 to 56% of women suffering from urinary incontinence (Shaw, 2002) and not surprisingly is a source of great stress. The disorder damages women's self-esteem and causes them to feel insecure in their feminine sexual role. Women's fears concerning the possible reactions of their partners to the disorder put an additional strain on their sexual relationships, which may cause them to develop various sexual dysfunctions (Gordon, 1999; Hilton, 1988; Shaw, 2002). Most women attempt to resolve the problem in some way, although strategies differ among women. Sexual dysfunctions and women's strategies of coping with them can negatively affect their partners' satisfaction with their sexual life and also their partner relationships as a whole. However, a review of research literature on the subject shows that very few studies have dealt with the issue of sexual functioning in women afflicted with urinary incontinence (Bidzan *in.*, 2004a,b; Smutek *in.*, 2004; Bidzan, 2008).

The goal of our study was to find out if women afflicted with urinary leakage during sex resort to any strategies of coping with the issue and if so, then what are these strategies.

MATERIAL AND METHODS

Stress urinary incontinence (SUI) or mixed urinary incontinence (MUI) with a strong component of stress urinary incontinence was diagnosed in 242 women who underwent a urinary and gynaecological examination in the NZOZ Pro-Vita Clinic for Urinary Incontinence Disorders in September 2004. The analysis of sexual functioning among women with urinary incontinence was based on data from detailed questionnaires and tests filled in by the study participants as well as on information gathered during a structured clinical interview concerning the participants' evaluation of the quality of their sexual life and their relationship as a whole. In a detailed questionnaire of our authorship we asked the participants whether they experienced urinary leakage during sexual activities and, if so, when and how often they experienced this. We also inquired as to whether urinary incontinence in any way affected their physical activity during sex and if they had resorted to any strategies of dealing with the problem. Additionally, we asked participants how urinary incontinence as a problem, as well as their strategies of dealing with it and their fears connected with it, interfered with or in any other way affected their sexual activity and consequently the quality of their sexual life and if and how all this in turn influenced their partner relationships. Finally, we asked participants if there were any other issues, besides urinary incontinence, which brought about changes in their sexual functioning around the time of the

onset of urinary incontinence. If participants did mention any other issues we asked them to evaluate how big an influence they had had on their sexual functioning. During the course of the study we excluded 27 participants who had handed in incomplete questionnaires and 29 participants who were not sexually active during the time they suffered from urinary incontinence.

The analysis was based on data obtained from 186 women who reported being sexually active during the period of time in which they suffered from urinary incontinence. 140 (75.27%) of the study participants had reported a problem with urinary leakage during intercourse at least a few times during the period in which they suffered from urinary incontinence. We divided them into several groups with respect to the following – whether they had made any changes to their sexual life since the onset of urinary incontinence and what were the causes of these changes. Group 1 consisted of 18 women (12.86% of all participants) with urinary leakage who reported that there had not been any changes in their sexual functioning since the onset of urinary incontinence (GM). Group 2 consisted of 28 women (20% of all participants) who reported that there had been various changes in their sexual functioning since the onset of urinary incontinence and that these changes had been caused solely by urinary incontinence (GM). Group 3 consisted of 69 women (49.26%) who attributed changes in their sexual functioning to both urinary incontinence and other factors (IP). Group 4 consisted of 46 women (24.73%) who had reported changes in their sexual functioning since the onset of urinary incontinence but had not attributed them to urinary leakage but to other factors (IP). Group 5 consisted of 46 (24.73%) women who had managed to contain their urine during sexual intercourse despite suffering from urinary incontinence. Changes in sexual functioning reported by these women might have been brought on by their fear of urinary leakage (GM) or by other factors (IP).

Table I highlights both the type of changes women afflicted with urinary incontinence made to their sexual activity and the frequency of their making these changes. The data apply both to women who had actually experienced urinary leakage during sex (140) and those who only feared urinary leakage during intercourse (46). All of the featured changes were attributed by these women to their urinary incontinence or their fear of urinary leakage, but 94 women also linked them to other factors (IP), namely: one's illness 28 (29.8%), husband's illness 37 (39.4%), poor quality of their partner relationship 43 (45.7%), their decreased libido 34 (36.2%), partner's decreased libido 39 (41.5%), financial problems 11 (11.7%), fear of pregnancy 6 (6.4%), decreased quality of partner sex attributed to one's partner 38 (40.4%), partner's alcohol problem 23 (24.5%).

During the clinical interviews we asked participants to describe changes that had taken place in their sexual functioning since the onset of urinary incontinence. We asked them specifically whether the frequency of engaging in sexual intercourse had changed, how they would evaluate the quality of

their sexual life now and before the onset of urinary incontinence and whether the changes they had made in their sexual functioning were effective in dealing with the issue of urinary incontinence. On the basis of the data we obtained, we decided to group the strategies participants used to prevent urinary incontinence during sexual activity into the following 4 groups of strategies:

- A – giving up sex altogether – CR in Tab. 1
- B – strategies and changes which ultimately eliminated urinary incontinence during sex but at the same time largely limited the frequency of sexual intercourse which in turn negatively affected participants' relationships with their partners. In Tab. 1 we refer to this group of strategies as OIS.
- C – strategies which according to participants allowed both them and their sexual partners to lead a satisfying sexual life; strategies in this group decreased the risk of urinary incontinence during sex but at the same time usually limited the participants' possibility of achieving sexual satisfaction during partner sex – OTS, DDP, UdO, RO, OAF, WFW, CBI, ZO – Tab. 1.
- D – when women reported experiencing only minor limitations in their sexual activity since the onset of urinary incontinence or when the changes they had to make in their sex life to avoid urinary leakage were very small – GM –. MPW, MB and OAF – Tab. 1.

Table 1. Strategies women use to deal with urinary incontinence during sex and the frequency with which they resort to them in the study population of women with urinary incontinence (GM) and those without urinary incontinence (TM).

Type of changes in sexual functioning	GM (n=140)		TM (n=46)	
	No. of women	(%)	No. of women	(%)
Passing water before sexual intercourse in fear of urinary leakage during sex (MPW)	125	89.3	21	45.7
Engaging in sexual intercourse in places where urinary leakage is not a problem and where one feels protected from the effects of urinary leakage (MB)	101	72.1	4	8.7
Limiting physical activity during sex (OAF)	80	57.1	5	10.9
Limiting the frequency of sexual intercourse (OIS)	39	27.85	1	2.2
Faking orgasm during intercourse (UdO)	33	23.6	1	2.2
Decreasing the number of orgasms (ZO)	36	25.7	1	2.2
Giving up one's orgasm during sexual intercourse (RO)	28	20	0	
Limiting the length of the intercourse to the time needed for the partner to achieve climax (OTS)	19	13.6	5	10.9
Prolonging foreplay and limiting actual intercourse to an absolute minimum necessary for the partner to climax (WFW)	19	13.6	3	6.5
More frequent than before the onset of urinary incontinence fulfilling one's partner sexually without engaging in intercourse (CBI)	11	7.9	4	8.7
Giving up oral sex altogether in fear of urinary leakage (RSO)	10	7.1	0	
Adjusting the length of intercourse to the rhythm of one's urinary urgency (DDP)	7	5.0	2	4.35
Giving up sexual intercourse altogether (CR)	2	1.4	6	13.0

We then compared the participants in particular study sub-groups with respect to their age, education level, area of residence and the frequency with which they resorted to the above listed strategies of dealing with urinary incontinence.

To verify our study hypotheses we used the StatSoft Inc. (2005) STATISTICA (data analysis software system) version 7.1. We used multiple regression to analyze correlations. To compare non-parametric data we used the Mann-Whitney test and for qualitative and for order type analysis we used the ANOVA Kruskal-Wallis test.

RESULTS

The degree of clinical progression in stress urinary incontinence did not differentiate the 4 study groups in a statistically significant way. The symptoms of stress urinary incontinence were less severe in those women who reported being able to contain urine during sexual intercourse ($p < 0.005$). In less severe forms of stress urinary incontinence leakage of urine only occurs during significant physical effort or when the bladder is very full. Thus, the risk of urinary leakage is smaller during average sexual activity.

The mean age in groups III and IV was similar – 54.9 and 55.06 respectively. The mean ages in groups I (50.9) and II (49.8) differed from the mean age in group IV (59.27) on a statistically significant level, $p=0.009$ i $p=0.03$ respectively. The women in group V were on average about 10 years older than the women in groups I and II. As women get older, they become more susceptible to chronic disorders such as dyspareunia and a decreased libido, which happen to be the main causes of changes in sexual functioning. Education level, vocation and place of residency did not differentiate the study participants.

The frequency and distribution of strategies are shown in Table 2.

Strategies A and B eliminated or significantly limited sexual intercourse. Strategies C and D on the other hand, hardly limited women in their sexual activity or the changes they made were, according to the participants, enough for their partners to be sexually fulfilled. The statistically significant differences between the study groups became apparent once we adopted such a division of the strategies (Fig. 1).

Table 2. Strategies women use to deal with urinary incontinence during sex and the frequency with which they resort to them in study groups I-IV (women who suffer from urinary incontinence during sex - GM and group V (women who don't suffer from urinary incontinence during sex – TM)

Strategies	Groups	GM (n=140)				TM (n=46)
		I (n=18)	II (n=28)	III (n=69)	IV(n=25)	V
A	-	2 (7.1%)	9 (13.0%)	8 (32.0%)	6 (13.0%)	
B	-	3 (10.7%)	33 (47.9%)	9 (36.0%)	8 (17.4%)	
C	-	14 (50%)	16 (23.2%)	1 (4.0%)	-	
D	-	18 (100%)	9 (32.1%)	11 (15.9%)	7 (28.0%)	32 (69.6%)

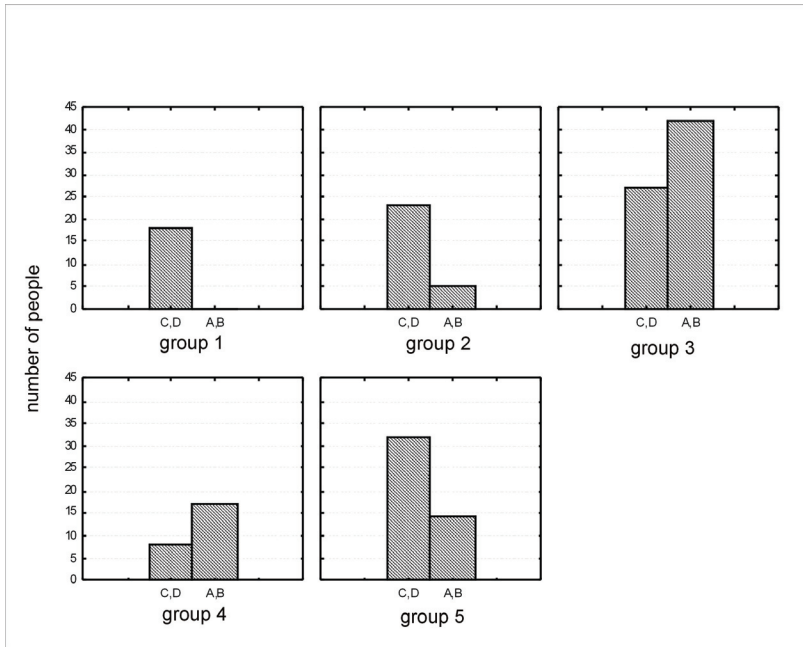


Fig. 1. Distribution of strategies A and B as well as C and D in the study sub-groups of women with urinary incontinence

Statistically significant differences in the distribution of less restrictive (C, D) or more restrictive strategies (A, B) were noted between groups I and III and I and IV ($p < 0.005$), and group II and group III ($p = 0.009$) and II and IV ($p < 0.016$). There were no statistically significant differences between groups I and II, III and IV. With respect to the division we adopted, group V did not significantly differ from the other groups.

The most restrictive strategies were used by women from groups III 42/ 69 (61%) and IV 17/25 (68%) where other factors besides urinary incontinence dominated or were the only reason behind changes in sexual activity. In groups II and V, in which urinary incontinence was the only reason for changes in sexual activity, less restrictive strategies were adopted. In group II women mostly resorted to strategy C 14/28 (50%), which decreased the risk of urinary incontinence during sex and allowed them to maintain a high quality level of partner sex, yet often significantly limited their own sexual satisfaction. In group V – women most often resorted to strategy D which was least restrictive 32/46 (70%). Although these women did not in fact suffer from urinary incontinence, they were very much afraid of it so they resorted to the simplest ways of preventing urinary incontinence – (WC) and (MB) and believed their partners had not noticed them doing that and therefore it had not affected the quality of their sex life.

DISCUSSION

Urinary incontinence and/or fear of urinary incontinence are two of the many factors which affect the quality of sex life among women afflicted with urinary incontinence. The woman's age, the age of her partner, their health problems as well as any limitations to their physical dexterity, family problems, problems at work and financial woes can all significantly limit a woman's sexual activity, independently of her struggle with urinary incontinence (Lew-Starowicz, 2000; Shaw, 2002; Sutherst, Brown, 1980). In our study group all these factors were often the causes of limitations to sexual functioning of women with urinary incontinence. The mean age in group IV of women afflicted with urinary incontinence, in which other factors affecting sexual functioning dominated, was 10 years higher than in group II, in which the only cause of changes in sexual functioning was urinary incontinence. The women in group IV resorted to more restrictive strategies more often than women in other study groups and they were also more often afflicted with other health disorders and suffered from changes in libido. The combination of all of these factors significantly limited their sexual activity. Education level and area of residency were similar in all the study groups. There were also no statistically significant differences among the study groups with respect to the clinical progression of urinary incontinence. This made it easier for us to compare the influence of urinary incontinence and that of other factors on changes in sexual functioning in women afflicted with stress urinary incontinence. In cases where the changes in sexual functioning were brought on solely by the urinary incontinence (group II), women resorted to less restrictive strategies and gave their sexual partners the possibility to achieve satisfaction during sexual intercourse and sacrificed their own satisfaction. It has to be mentioned however that in this homogenous group, in which urinary incontinence was the sole reason behind changes in sexual functioning, a few women (5 women or 17.7%) did use restrictive strategies which severely limited their sexual activity. More research has to be done in order to better understand the problem. Since urinary incontinence during sex can potentially seriously affect a women's partner relationship, we personally believe that women afflicted with the disorder should be treated by both a physician and a psychotherapist.

CONCLUSIONS

In coping with urinary incontinence during sex women resort to strategies of avoiding urinary leakage characterized by different degrees of restriction to their sexual functioning.

Changes in sexual functioning in women afflicted with urinary incontinence, as well as the strategies they adopt to deal with the issue, are very often the result of multiple factors, not just the mere fact that a women leaks urine during sex.

Women for whom urinary incontinence during sex was the only cause of changes in their sexual functioning were more likely to make an extra effort to satisfy their partners sexually than women for whom urinary incontinence was one of many causes of sexual dysfunction.

The older a woman with urinary incontinence is, the greater the probability that changes in her sexual functioning have been brought on by other factors rather than her struggles with urinary incontinence.

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Correspondence address:

Mariola Bidzan

Instytut Psychologii UG

Pomorska 68

80-343 Gdańsk

e-mail: psymbi@univ.gda.pl