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SEXUAL FUNCTION IN OLDER WOMEN WITH PELVIC FLOOR SYMPTOMS IN PRIMARY CARE: A CROSS-SECTIONAL STUDY

Hypothesis / aims of study

Many women experience pelvic floor symptoms. Experiencing of more pelvic floor symptoms is associated with poorer sexual functioning (1). Knowledge about the relationship between pelvic floor symptoms and sexual functioning in postmenopausal women and women who are seen in primary care is scarce, as most studies include women of all ages and are performed in (uro)gynecology clinics. It is relevant to study sexual problems in older women with pelvic floor symptoms because sexual functioning is an important factor that can negatively influence quality of life in postmenopausal women (2).
The aim of this study was to investigate which factors best predicted sexual functioning in older women with pelvic floor symptoms in primary care. Secondary, we compared sexually active and inactive women to investigate if it is likely that sexually inactive older women abstain from sex due to symptoms distress or prolapse.

Study design, materials and methods

This is a cross-sectional study in women (≥55 years), registered in 20 general practices in the northern part of the Netherlands, who screened positive on a pelvic floor symptom questionnaire. Data were used from the POPPS project (2009-2012) which incorporates: two randomized controlled trials on the effects and cost-effectiveness of conservative treatments for pelvic organ prolapse in older women.
The main outcome in this study constituted sexual functioning, measured with the Pelvic Organ Prolapse/Urinary Incontinence Sexual Function Questionnaire (PISQ-12). For assessment of pelvic floor symptoms the Pelvic Floor Distress Inventory (PFDI-20) was used. Patient characteristics were collected during a standardized interview. Prolapse was assessed using the Pelvic Organ Prolapse Quantification (POP-Q). Women were categorized in: no prolapse, mild prolapse (leading edge of prolapse above hymenal remnants) or advanced prolapse (leading edge of prolapse at or beyond hymenal remnants).
The analyses involved all women who had a partner. Independent t-tests and Mann-Whitney U tests were used to compare continuous variables for sexually active and inactive women. Chi-square and Fisher's Exact tests were used for categorical data. Within sexually active women we performed bivariate and multivariate linear regression analyses to investigate which variables best predicted sexual functioning. Sexual functioning (PISQ-12 score) was the outcome. Determinants were patient characteristics, pelvic floor symptoms (PFDI-20 score) and the degree of prolapse. Determinants with p<0.157 in bivariate analyses were included in multivariate analyses. In multivariate analyses, a best subset backward stepwise elimination procedure was manually performed, with p>0.157 as the criterion for removal from the model (3).

Results

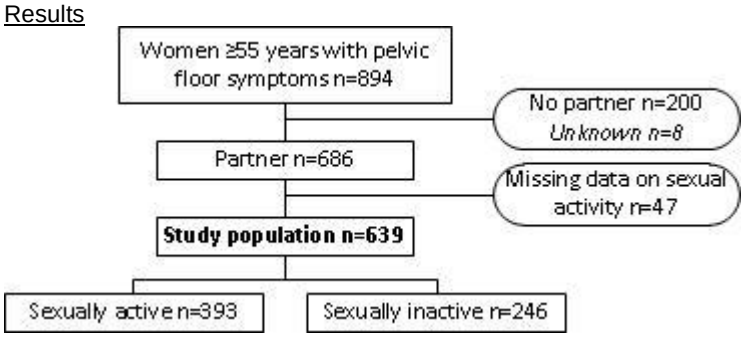

Figure 1. Flowchart study population

The study population consisted of 639 women with a partner (figure 1), of which 393 were sexually active and 294 sexually inactive. Compared to sexually inactive women sexually active women were younger (mean ± SD: 62.6 ± 5.2 vs. 67.3 ± 6.6, p<0.001), reported a higher education (p<0.001), less comorbidity and less women had had a hysterectomy (16.5% vs. 26.0%, p=0.004). There were no differences in pelvic floor symptoms (median (IQR): 57.3 (33.3-83.3), 59.0 (39.6-87.5), p=0.201) nor in the degree of prolapse (p=0.102) between sexually active and inactive women.
Table 1 shows the results of bivariate and multivariate linear regression analyses. Within the group of sexually active women, PFDI-20 score (p<0.001), hysterectomy (p=0.011) and pelvic floor surgery other than hysterectomy (p=0.013) were selected for multivariate linear regression. The final multivariate linear regression model included PFDI-20 score (p<0.001) and pelvic floor surgery other than hysterectomy (p=0.065) (R^2 0.133).

Table 1. Multiple linear regression analyses in sexually active women, N=378[*].

	Bivariate			Multivariate[‡]	
Variables	R^2	B (CI)	*p*-val.	B (CI)	*p*-val.
PFDI-20[†]	0.13	-0.05 (-0.06,-0.04)	<0.001	-0.051 (-0.06,-0.04)	<0.001
Degree of prolapse	0.00	0.18 (-0.37,0.73)	0.646		
Age	0.00	-0.06 (-0.14,0.10)	0.227		
BMI	0.00	-0.03 (-0.11,0.05)	0.604		
Parity	0.00	0.12 (-0.22,0.45)	0.616		
Education	0.00	-0.03 (-0.46,0.41)	0.930		

Hysterectomy†	0.02	-1.89 (-2.92,-0.85)	0.011	
Other pelvic floor surgery†	0.02	-2.80 (-4.37,-1.23)	0.013	-1.934 (-3.41,-0.46) 0.065
Diabetes Mellitus	0.00	1.04 (-0.31,2.38)	0.279	
Hypertension	0.00	-0.06 (-0.89,0.76)	0.913	
Cardiovascular disease	0.00	0.04 (-1.73,1.81)	0.976	
Arthrosis	0.00	-0.15 (-0.92,0.61)	0.778	
Chronic pulmonary disease	0.00	-0.17 (-1.36,1.02)	0.843	

Abbreviations: PISQ-12 = Pelvic Organ Prolapse/Urinary Incontinence Sexual Function Questionnaire-12, PFDI-20 = Pelvic Floor Distress Inventory-20
**15/393 incomplete cases, resulting in n=378 eligible women, †Items selected with p<0.157, ‡Final multivariate model, items selected with p<0.157, R^2=0.133*

Interpretation of results

In our population of older women with pelvic floor symptoms from primary care with and without prolapse we found that sexual functioning is best explained by pelvic floor symptoms and pelvic floor surgery other than hysterectomy. Pelvic floor symptoms were more important than pelvic floor surgery but explained only 13% of variance in sexual functioning. There was no association between the degree of prolapse and sexual function.
Sexually inactive women were older and experienced more comorbidity compared to sexually active women but there were no differences regarding pelvic floor symptoms or degree of prolapse. This could imply that poorer overall condition is a potential reason why sexual activity decreases and not the presence of a prolapse or symptom distress.

Concluding message

Pelvic floor symptoms and pelvic floor surgery other than hysterectomy are predictors for poorer sexual functioning in older women with pelvic floor symptoms in primary care. The results of our study indicate that poorer health and older age are more predictive of sexual inactivity than pelvic floor symptoms or prolapse. Sexual functioning is important for quality of life, also in older women. General practitioners should be aware of sexual problems and, if indicated, discuss it with the patient. A consultation for pelvic floor symptoms may be a suitable opportunity for this. Discussing sexual problems in general practice might encourage patients to seek help if they experience problems with that aspect of life.
Further research should focus on the effects of treatment of pelvic floor symptoms on sexual functioning and thereby on the quality of life of older women in primary care.

References

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Disclosures

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