

PREVALENCE OF ANXIETY AND AFFECTIVE SYMPTOMS AND THEIR ASSOCIATION WITH PELVIC FLOOR DYSFUNCTIONS-A CROSS SECTIONAL COHORT STUDY AT A PELVIC CARE CENTRE

Hypothesis / aims of study

Pelvic floor dysfunctions (PFD), such as voiding complaints, urinary or fecal incontinence or prolapse, are prevalent and associated with decrease in quality of life. PFD are often complex, multifactorial and with interactions between the different PFD. The primary aim of the present study is to describe the prevalence of affective complaints in a cohort of patients in a pelvic care centre (PCC). The secondary aim is to describe interactions between PFD and depression and anxiety.

Study design, materials and methods

The present study is a cross sectional cohort study at an academic PCC. First-contact patients are included in a triage system (1) and filled out questionnaires regarding pelvic floor complaints in 7 different domains, i.e., voiding dysfunction, urinary incontinence, pelvic organ prolapse, constipation, fecal incontinence and sexual problems. Additionally, Hospital Anxiety and Depression scores are obtained (2). Linear (dummy-)regression analysis of HADS depression and HADS anxiety scales is done to test the effects of A: relevant clinical predictors related to pelvic care problems, B: other relevant clinical predictors not related to pelvic care problems and C: demographic characteristics of the patients.

| Predictors: | Unstandardized Coefficients | | |
|--------------------------------------|-----------------------------|------------|---------|
| | B | Std. Error | P-value |
| Age | 0.008 | 0.002 | <0.001* |
| Gender | 0.363 | 0.125 | 0.004* |
| Urine Incontinence | 0.220 | 0.067 | 0.001* |
| Voiding dysfunction | -0.021 | 0.067 | 0.760 |
| Prolapse problems | -0.322 | 0.091 | <0.001* |
| Obstipation | 0.122 | 0.090 | 0.176 |
| Fecal Incontinence | -0.001 | 0.086 | 0.994 |
| Sexual problems | 0.460 | 0.149 | 0.002* |
| Fecal composition complaints | 0.066 | 0.020 | 0.001* |
| Serious headaches | 0.156 | 0.044 | <0.001* |
| Incomplete bladder emptying | 0.049 | 0.024 | 0.037* |
| Urine Incontinence episodes/24 hours | 0.084 | 0.028 | 0.002* |
| Stranguria | 0.056 | 0.022 | 0.011* |
| Diabetes Mellitus | 0.101 | 0.047 | 0.033* |
| Prolapse-related Voiding Problems | 0.284 | 0.118 | 0.016* |

Table 1a: Final model results from dummy-regression analysis on square-root-transformed scores of HADS depression scale as a dependent variable using clinical predictors and background demographics of patients as predictors. Variance explained : 0.120 . N=1506. *=statistically significant.

| Predictors: | Unstandardized Coefficients | | |
|-----------------------------------|-----------------------------|------------|---------|
| | B | Std. Error | p-value |
| Age | 0.002 | 0.002 | 0.191 |
| Gender | 0.239 | 0.229 | 0.298 |
| Urine Incontinence | -0.244 | 0.179 | 0.173 |
| Voiding dysfunction | -0.037 | 0.058 | 0.516 |
| Prolapse problems | -0.209 | 0.079 | 0.008* |
| Obstipation | 0.106 | 0.083 | 0.200 |
| Fecal Incontinence | 0.060 | 0.072 | 0.407 |
| Sexual problems | 0.276 | 0.131 | 0.035* |
| Serious headaches | 0.135 | 0.038 | <0.001* |
| Incomplete bladder emptying | 0.053 | 0.020 | 0.008* |
| Kidney stones | 0.211 | 0.073 | 0.004* |
| Stranguria | 0.048 | 0.019 | 0.012* |
| Slime in feces (past 6m) | 0.059 | 0.029 | 0.041* |
| Prolapse-related Voiding Problems | 0.208 | 0.103 | 0.043* |
| Urine Incontinence in older age | 0.006 | 0.003 | 0.029* |
| Fecal Incontinence in males | 0.377 | 0.167 | 0.024* |
| Older women | -0.008 | 0.004 | 0.040 |

Table 1b: Final model results from dummy-regression analysis on square-root-transformed scores of HADS anxiety scale as a dependent variable using clinical predictors and background demographics of patients as predictors. Variance explained : 0.074 N=1507. *=statistically significant.

Results

A total of 1510 eligible first-contact patients (age mean (sd): 57.1 (16.9)) of the PCC were identified who filled out all questionnaires. In this cohort the prevalence of anxiety and depression complaints were 30.9 and 20.3%, respectively. The variance explained for the final regression model was 0.12 for depression, for anxiety this was 0.074. A final regression model for each outcome is presented in Table 1a and b.

Interpretation of results

Anxiety and depression are prevalent in a cohort of PFD, nevertheless psychological assessment is not routinely done in patients with PFD. PFD can explain some variance within the anxiety and depression score

Concluding message

We advocate a multidisciplinary approach, containing psychological assessment for (complex) PFD in order to obtain better treatment results.

References

1. Berghmans B, Nieman F, Leue C, Weemhoff M, Breukink S, van Koevinge G. Prevalence and triage of first-contact complaints on pelvic floor dysfunctions in female patients at a Pelvic Care Centre. *Neurourol Urodyn*. 2015.
2. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. *Acta psychiatrica Scandinavica*. 1983;67(6):361-70.

Disclosures

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