

## DEVELOPMENT AND VALIDATION OF THE PELVIC FLOOR INVENTORIES (PELFIS)

### Hypothesis / aims of study

To evaluate the validity and reliability of the PelFIs, a questionnaire for men and women, developed to assess pelvic floor dysfunction and to create uniformity in a new condition-specific pelvic floor questionnaire, to enable research evaluation as a support in history taking, but mostly as a research tool.

### Study design, materials and methods

The PelFIs is a 73-item instrument for women and 76-item instrument for men measuring the degree of pelvic floor dysfunction, containing nine different symptom domains. To develop a domain, questions have been selected which, from a clinical point of view, should configure a domain. Additional items regarding erectile dysfunction were added to ensure that the full range of issues relating to symptoms of pelvic floor dysfunction was addressed. The PelFIs was administered to men and women without complaints (N = 120) and to men and women with pelvic floor dysfunction (N = 100). Two types of reliability of the PelFIs questionnaire were assessed: internal consistency and test-retest reliability. Construct validity was established comparing those with complaints with those without and by intercorrelating the domains.

### Results

A total of 220 questionnaires were completed; by 147 women and 73 men. Some domains in the men's questionnaire had a low alpha ( $\alpha$ ) although the overall  $\alpha$  was good. The internal consistency of the men's questionnaire was 0.84. The internal consistency of the women's questionnaire was 0.88. From a clinical point of view, some questions can not be removed from the questionnaire because of their clinical value.

### Interpretation of results

We evaluated the validity and reliability of the PelFIS. The internal consistency of some of the scales, although not low, was less than may be wished for. However, from a clinical point of view; some questions cannot be removed from the questionnaire in women and men because of their clinical value, despite these items resulting in a lower alpha

Our hypothesis that domains are correlating supports our opinion that in case of complaints of micturition, defecation, and/or sexual dysfunction a condition-specific pelvic floor questionnaire has to be assessed, to standardize history taking.

### Concluding message

The PelFIs is a new reliable, valid and conceptually clear questionnaire. It is a practical instrument with good clinimetric properties focusing on the major issues in pelvic floor dysfunction. The use of PelFIs may provide a better and reliable insight in patients experiencing specific complaints of micturition, defecation and/or sexual dysfunction due to pelvic floor dysfunction.

Table: Correlation domains womens questionnaire  
 \*\*: Correlation is significant at 0.01 level and relevant ( $r$ ) >0.30

Pearson Correlation	Prolaps	Micturition pattern	Urinary incontinence	Obstructive micturition	Defecation pattern	Fecal incontinence	Obstipation	Pelvic Floor Pain
Prolaps	1	-	-	-	-	-	-	-
Micturition pattern	.143	1	-	-	-	-	-	-
Urinary incontinence	.271**	.348**	1	-	-	-	-	-
Obstructive micturition	.063	.669**	.291	1	-	-	-	-

Defecation pattern	,032	,445**	,053	,297	1	-	-	-
Fecal incontinence	,049	,424**	,397**	,335**	,483**	1	-	-
Obstipation	,089	,330**	,131	,419**	,427**	,290	1	-
Pelvic Floor Pain	,054	,326**	,122	,421**	,381**	,282	,507**	1

**FUNDING:** None

**HUMAN SUBJECTS:** This study did not need ethical approval because history taking is standard care but followed the Declaration of Helsinki Informed consent was obtained from the patients.