

## PELVIC ORGAN PROLAPSE (POP) AMONG ARABIC MUSLIM WOMEN: DIFFERENT PROSPECT OF MANAGEMENT

### Hypothesis / aims of study

Success after surgery for POP is complex and should be evaluated in multiple domains, including anatomical and functional outcomes. The primary objective of this study was to modify the Pelvic Floor Impact Questionnaire (PFIQ) and to introduce it with Pelvic Floor Distress Inventory (PFDI) -short form into clinical and research practice to assess POP among Arabic Muslim women. We validated then administered the 2 questionnaires to a group of Arabic Muslim women suffering from symptomatic POP who are going to have pelvic floor reconstructive surgery. The secondary objective was to assess the short term functional and anatomical outcomes of surgical repair in a group of Arabic women with symptomatic POP.

### Study design, materials and methods

The study was approved by the local ethical committee. We added a characteristic (prayer) which the PFIQ-7 does not assess. We created a single question inquiring about the impact of prolapse on prayer and added this question to the urinary and bowel scales of the PFIQ short form [Incontinence Impact Questionnaire (IIQ-8), Colo-anal Rectal Impact Questionnaire. After generating this potential item, linguistic validation of the 2 questionnaires was done. Pretesting of the final drafts of the 2 questionnaires was done. The potential items of the questionnaires were administered by means of in-person interview with 20 women with symptomatic POP (who had not participated in the subsequent study). The aim was to evaluate individual item performance (internal consistency) and test-retest reliability of the 2 questionnaires. Internal consistency among sets of items was evaluated with item-total correlations and the Cronbach  $\alpha$  coefficient. Test-retest reliability was evaluated with weighted  $\kappa$  statistics. Items that did not meet the criteria were revised to produce the final version of the questionnaires that was used in the main study. Subsequent Study - This is a prospective study that included all women with significant symptomatic POP (stage II or greater by POP-Q), for whom repair was indicated. Women were recruited from the outpatient clinic of the Female Urology unit, Urology Department in a tertiary referral university hospital. Cystoectocele repair was done in 29 cases (37%); cystocele repair in 38 cases (49%), while rectocele repair in 11 cases (14%). Concomitant anti-incontinence procedures were performed in 60 patients (51 complaining of and 9 women with urodynamic diagnosis of SUI). The primary outcome of this analysis was the changes in the PFDI and PFIQ scores after surgery. In addition, the prevalence of urinary, bowel and prolapse symptoms (based on responses to specific questions in the PFDI-20) before surgery were compared with those after surgery. The secondary endpoint was the incidence of anatomical failure. Subjects were defined as having an anatomic cure if POP-Q point Bp and Aa were  $\leq -2$  at the 6-month postoperative visit. Analysis of differences in the PFDI and PFIQ scale scores (Continuous variables) was performed using paired t-test or Wilcoxon signed rank test as appropriate. Paired proportional data (proportion of patients having the condition before and after surgery) were compared with the use of the McNemar's chi-square test. SPSS software version 15.0 was used for the data analysis. Probability values of  $<0.05$  were considered statistically significant.

### Results

Twenty women were enrolled in the pilot (pretesting) study. The 4-point response scale of question inquiring about impact on prayer (Q1) is described as follow: 0, not at all; 1, makes me to repeat the ritual cleansing for each prayer; 2, makes me to repeat the prayer; 3, almost makes me to stop praying. The number of missing or not interpretable responses per item of the PFIQ ranged from 1.8% to 6.9%. Internal consistency of item inquiring about prayer was good (Cronbach  $\alpha = 0.78$ ). Test-retest reliability of individual PFIQ items was variable, with weighted  $\kappa$  statistics from 0.35 to 0.90 (median, 0.69; P .000). Subsequent Study - Between September 2004 and March 2007, 78 consecutive women with symptomatic POP were enrolled in the study. There were significant improvements in urinary, colorectal, and prolapse scales of the PFDI and the PFIQ after surgery indicating decreased bother and improved health-related QoL. After surgery, 89.7% of our study subjects (n= 70) had an anatomical cure, while 10.3% (n=8) had anatomical failure.

### Interpretation of results

The PFIQ in its current form is insufficient to assess POP among Arabic Muslim women. We modified the PFIQ (by adding a characteristic inquiring about prayer) then linguistically validated it as well as the PFDI to assess POP among Arabic Muslim women.

### Concluding message

PFDI and modified PFIQ are suitable to assess symptoms and QoL of Arabic Muslim women suffering from symptomatic POP. In the short term, cystoectocele with and without concomitant anti-incontinence procedure provides good anatomic (90% cure rate) and functional results.

**0**  
**(Not at all)**

**1**  
**(less than half**  
**of the time)**

**2**  
**(More**  
**half of**  
**than**  
**the**  
**time)**

**3**  
**(almost**  
**always)**

**IIQ-8**

- Prayer \*
- Household Chores
- Physical Activities
- Entertainment
- Travel
- Social Activities
- Emotional Health
- Low Self-esteem

**CARIQ-8**

- Prayer \*
- Household Chores
- Physical Activities
- Entertainment
- Travel
- Social Activities
- Emotional Health
- Low Self-esteem

**POPIQ-7**

- Household Chores
- Physical Activities
- Entertainment
- Travel
- Social Activities
- Emotional Health
- Low Self-esteem

The modified PFIQ short form

\* The response answer for prayer is as follow: 0, not at all; 1, makes me to repeat the ritual cleansing for each prayer; 2, makes me to repeat the prayer; 3, almost makes me stop praying

<b><i>Specify source of funding or grant</i></b>	<b>No funding or grant of any source</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>Ethical Committee, Faculty of Medicine, Assiut University</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>