



BRITISH MEDICAL JOURNAL



British Medical Journal

Volume 3, No.4, July 2023

Internet address: <http://ejournals.id/index.php/bmj>

E-mail: info@ejournals.id

Published by British Medical Journal

Issued Bimonthly

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**RESULTS OF ASSESSMENT OF THE STATE OF PELVIC FLOOR
FUNCTION IN WOMEN**

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Abstract: Pelvic organ prolapse in women is of great medical and social importance, as it significantly reduces the quality of life of women. An anonymous electronic survey of 521 women aged 19-77 years (average age – 34.8±1.3 years) according to the Pelvic Floor Distress Inventory Questionnaire (PFDI-20) showed that every fifth woman (19.4%) suffers from moderate pelvic organ prolapse, and 1.7% has a severe degree. The determination of the pathology of the pelvic floor organs allows the method of an active anonymous question to solve medical problems of diagnosis of urological, gynecological, gastroenterological pathology, both in psychological and economic terms.

Keywords: pelvic floor, pelvic organ prolapse, urinary tract dysfunction, PFDI-20, quality of life of women.

Pelvic floor disease (Pelvic fundus diseases - PFD), such as urinary incontinence, fecal incontinence and pelvic organ prolapse, affect many women and have a significant impact on their quality of life. Studies have shown that symptoms of lower urinary tract dysfunction, such as urgency, frequent urination, urinary retention, and urinary incontinence, are more common in women with constipation. [3, 5]. In addition, constipation has been shown to be significantly associated with pelvic organ prolapse in epidemiological studies as well as in case-control studies [1, 4]. Given the anatomical and functional role of the pelvic floor in defecation and urination, it is not surprising that these problems are often associated with pelvic organ prolapse.

Pelvic Questionnaire floor Distress Inventory Questionnaire (PFDI-20) helps assess the degree of pelvic organ prolapse. The PFDI-20 is based on the structure and content of two widely used quality-of-life questionnaires for specific conditions in women with lower urinary tract dysfunction, genitourinary (UDI) and lower gastrointestinal tract. The PFDI questionnaire can be used by clinicians and investigators to assess and quantify the extent of lower urinary tract and gastrointestinal prolapse, as well as symptoms of pelvic organ prolapse, affecting the quality of life of women with pelvic organ disease. PFDI-20 has 20 item questions and 3 subscales : UDI-6 assessment of urinary tract dysfunction; POPDI-6 - 6 questions to assess pelvic organ prolapse and CRADI-8 - 8 questions to assess colorectal -anal dysfunction. Each question has 5 options - how often the listed symptoms disturb the patient: answers from "0" - there are no symptoms to "4" - always. Key (interpretation): The PFDI-20 has a maximum score of 300 indicating the worst symptoms of pelvic organ prolapse. When calculating the points, the arithmetic mean is calculated in each group of questions (scatter from 0 to 4), the resulting value is multiplied by 25, while the spread of indicators is 0-100 points. Missing responses are regarded as the arithmetic mean for the given questionnaire. At the same time, depending on the number of points, the degree of severity of violations is differentiated. The higher the score, the more pronounced the impact of pelvic floor dysfunction on a woman's quality of life . Some studies have grouped the level of pelvic floor distress into mild, moderate, and severe based on a total PFDI-20 score [2]. Pelvic floor prolapse was considered mild if the overall PFDI score was ≤ 100 , moderate if the PFDI score was > 100 and ≤ 200 , and severe if the PFDI score was > 200 .

The purpose of this study was to assess the symptoms of pelvic floor dysfunction using the Pelvic Floor Dysfunction Questionnaire - PFDI-20.

Study design. All women were asked to anonymously complete the PFDI-20 electronic questionnaire as part of the clinical study. A prospective cross-sectional study with an analytical approach was used. The questionnaire was created and distributed using the <https://prolaps-survey.domain.uz>, a secure web-based platform for creating and managing surveys and online databases, and was distributed via telegram and instagram channels to respondents. The questionnaires were filled in by the women themselves after signing the informed voluntary consent. The study was approved by the Tashkent Medical Academy.

Material and research methods. 521 women aged 19 to 77 years old (mean age 34.8±1.3 years old) underwent an electronic survey within one week. The women answered the PFDI-20 questionnaire anonymously from their mobile devices. The results obtained were summarized and the arithmetic mean was calculated according to the key of the questionnaire. The reliability of the method is 0.86, $p < 0.001$, the sensitivity is 1.48, $p < 0.0001$, the standardized answer is 1.09, $p < 0.0001$.

Research results. When conducting a survey, we found that 411 (78.9%) respondents received ≤ 100 points, 101 (19.4%) had moderate prolapse, the score was >100 and ≤ 200 , while severe prolapse was detected in 9 (1.7%), where the PFDI was >200 . Consequently, every 5th of the women surveyed, through active detection, had signs of organ dysfunction of moderate severity.

When questioned about the general symptoms of pelvic organ prolapse - in terms of frequency and intensity, women most often provided positive answers to symptoms such as a feeling of incomplete emptying of the bladder, a feeling of pressure in the lower abdomen, heaviness in the pelvic area - every 10th woman noted these signs are frequent and constant, and the feeling of falling out of the vagina is every 5th (Table 1). Less common were symptoms such as the need to reposition the vagina or part of the rectum to completely empty the bladder and rectum.

The problem of constipation remains relevant today, and with age, the presence of prolapse of the pelvic organs with the wrong lifestyle is exacerbated. We were interested in studying the problem of constipation and the connection with pelvic organ prolapse due to the fact that diseases of the gastrointestinal tract, both in men and women, including gastritis, cholecystitis, hepatocholecystitis, colitis, are the most common in our region among all extragenital pathology.

Table 1.
Results of the PFDI-20 questionnaire,

POPDI-6 - pelvic organ prolapse score %, (abs)

		0	1	2	3	4
1	Do you usually experience a feeling of pressure in your lower abdomen?	57.6% (298)	12.4 (64)	18.8 (97)	9.3 (48)	1.9 (10)
2	Do you usually experience heaviness in the pelvic area?	56.7% (293)	15.5% (80)	15.5% (80)	8.7% (45)	3.7% (19)
3	Do you have something falling out of your vagina that you can feel or see?	54.7% (283)	12% (62)	14.3% (74)	12% (62)	7% (36)
4	Do you need to reposition your vagina or part of your rectum to have a complete bowel movement?	76.6% (396)	7.9% (41)	9.3% (48)	5.2% (27)	15
5	Do you need to reposition your vagina or part of your rectum to empty your bladder completely?	82.4% (426)	7.4% (38)	6% (31)	2.9% (15)	1.4% (7)
6	Do you usually experience a feeling of incomplete bladder emptying?	52% (269)	20.1% (104)	18.2% (94)	6% (31)	3.7% (19)

Our study showed that the most common need for strong straining to empty the intestines, a feeling of incomplete emptying of the intestines, episodes of gas incontinence, a little less often - pain during defecation, unbearably strong urge to defecate (Table 2).

Evaluation on a point scale showed that 53 (10.3%) women most often noted the need for strong straining to empty the intestines by 4 points. It was interesting to evaluate the obtained results in points, as 3 points more common were such symptoms as: a feeling of incomplete emptying of the intestine after defecation in 43 (8.3%) episodes of gas incontinence 43 (8.3%), pain during defecation 39 (7.5%) of the respondents.

Table 2.
Results of the PFDI-20 questionnaire,
CRADI-8 - colorectal- anal dysfunction score %, (abs)

		0	1	2	3	4
1	Do you feel the need for strong straining to empty your bowels?	33.8% (175)	21.9% (113)	21.7% (112)	12.4% (64)	10.3% (53)
2	Do you have a feeling of incomplete bowel movement after a bowel movement?	42.7% (221)	21.3% (110)	22.4% (116)	8.3% (43)	5.2% (27)
3	Do you have episodes of fecal incontinence with well-formed stools?	86.8% (449)	7.5% (39)	3.3% (17)	1.4% (7)	15)
4	Do you have episodes of fecal incontinence with loose stools?	74.9% (387)	12.8% (66)	9.1% (47)	1.9% (10)	1.4% (7)
5	Do you have episodes of gas incontinence?	45.3% (234)	20.9% (108)	19.3% (100)	8.3% (43)	6.2% (32)
6	Do you experience pain during bowel movements?	57.4% (297)	15.7% (81)	15.1% (78)	7.5% (39)	4.3% (22)
7	Do you experience an unbearably strong urge to defecate?	69.2% (358)	13% (67)	9.3% (48)	4.8% (25)	3.7% (19)
8	Have you ever had part of your rectum protrude through your anus?	72.3% (374)	13.9% (72)	7.7% (40)	3.5% (18)	2.5% (13)

The main urogynecological pathological symptoms were: stress urinary incontinence (59.2%), frequent urination (53.2%), urinary incontinence (48.7%), pain or discomfort in the lower abdomen or genital area (51.6 %), and the rarest is difficulty emptying the bladder (19.9%) (Table 3) . Before contacting us, 37 (7.2%) women had repeated prolapse of the walls of the vagina and uterus after surgical treatment, hysterectomy in history was in 16 (3.1%) . The symptom of PFD dysfunction, measured by the PFDI-20 scale, did not differ significantly in age categories.

Table 3
Results of the PFDI-20 questionnaire,
UDI-6 urinary tract dysfunction score %, (abs)



		0	1	2	3	4
1	Do you have frequent urination?	46.8% (242)	21.7% (112)	15.9% (82)	10.4% (54)	5.2% (27)
2	Do you have urinary incontinence due to a strong urge to urinate?	51.3% (265)	19.5% (101)	16.2% (84)	5.8% (30)	7.2% (37)
3	Do you have urinary incontinence when coughing, sneezing, or laughing?	40.8% (211)	22.2% (115)	21.3% (110)	8.5% (44)	7.2% (37)
4	Do you lose urine in small amounts (drop by drop)?	66.5% (344)	12.6% (65)	11.4% (59)	4.4% (23)	5% (26)
5	Are you experiencing difficulty emptying your bladder?	80.1% (414)	8.1% (42)	7% (36)	2.3% (12)	2.5% (13)
6	Do you experience pain or discomfort in your lower abdomen or genital area?	48.4% (250)	22.2% (115)	19.5% (101)	6.6% (34)	3.3% (17)

It should be noted that the questionnaire revealed that the predominant dysfunction of the pelvic organs, accompanied by a worse state of the pelvic floor, is stress urinary incontinence. Pain syndrome also often affects the quality of life of women, more often at a young age.

Thus, the use of electronic questionnaires is the best approach to establish clinically significant changes in the organs of the lower genitourinary and gastrointestinal tract. It was found that the anonymous electronic questionnaire on PFDI- 20 is unique in its kind and allows not only to identify and determine changes in a woman's body in points during the initial survey, but also to inform patients about their health status, motivate the female population to visit a gynecologist, urologist, gastroenterologist and family medicine doctors, to involve patients in the protection of their health in general, in order to improve their quality of life. Due to the relevance of this problem, it is necessary in further studies to study the role of specialized physical activity in pelvic organ prolapse [6].

Based on the results of the questionnaire, the definition of changes identified in the overall assessment of PFDI-20, the information obtained is considered "clinically important" for patients with pelvic floor dysfunction. Electronic questionnaire PFDI-20, which includes several questionnaires, is useful in general clinical and private highly specialized clinical (urologist, gynecologist, gastroenterologist, proctologist) practice, appropriate, cost-effective in special situations, including intimate parties, also minimizing the psychological burden on the respondent.

Used literature.

1. Akter F, Gartoulla P, Oldroyd J, Islam RM. Prevalence of, and risk factors for, symptomatic pelvic organ prolapse in Rural Bangladesh: a cross-sectional survey study. *Int Urogynecology J* 2016;27:1753-1759.

2. Barber MD, Kuchibhatla MN, Pieper CF, Bump RC. Psychometric evaluation of 2 comprehensive condition-specific quality of life instruments for women with pelvic floor disorders. *Am J Obstet Gynecol* 2001;185:1388-1395.

3. Carter D, Beer-Gabel M. Lower urinary tract symptoms in chronically constipated women. *Int Urogynecology J* 2012;23:1785-1789

4. Jelovsek JE, Walters MD, Paraiso MF, Barber MD. Functional bowel disorders and pelvic organ prolapse: a case-control study. *Female Pelvic Med Reconstr Surg* 2010;16:209-214.

5. Wyndaele M, De Winter BY, Pelckmans PA, De Wachter S, Van Outryve M, Wyndaele JJ. Exploring associations between lower urinary tract symptoms (LUTS) and gastrointestinal (GI) problems in women: a study in women with urological and GI problems vs a control population. *BJU Int* 2015;115:958-967

6. Yuldasheva D. Yu. et al. The role of specialized physical activity in pelvic organ prolapse. - 2021.