

Impact Of Pelvic Organ Prolapse On Quality Of Life Among Women: A Cross-Sectional Study

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I. Introduction

- Pelvic organ prolapse is a major component of pelvic floor diseases, characterized by descent of pelvic organs causing pressure, bulge symptoms, urinary complaints, bowel disturbances & sexual dysfunction.
- Pop q system offers an objective, standardized method to categorise severity. Several studies have shown anatomical severity doesn't always correlate with the level of symptom distress or functional impairment experienced by women.
- To adress this inconsistency two valid & reliable tools pelvic floor distress inventory -20(PFDI-20)& Pelvic floor impact questionnaire -7(PFIQ-7) used to quantify symptom burden & impact of pelvic floor dysfunction on daily activities, emotional well being and overall quality of life.
- Despite their clinical relevance, these questionnaires are still underutilised In many settings.
- Understanding the relationship between POP-Q staging and patient reported symptoms can guide more effective, patient centered management strategies and optimising outcomes for affected women

II. Aims & Objectives

1. To assess the severity of pelvic floor symptoms using PFDI-20 & it's domains
2. To evaluate the impact of pelvic floor disorders on daily functioning and quality of life using PFIQ-7
3. To determine the distribution of pelvic organ prolapse severity among the study participants using the POP-Q staging system.
4. To analyse correlation between POP-Q stage & total scores of PFDI-20 & PFIQ-7.
5. To identify the most distressing symptom domains & most functionally limiting aspects of pelvic floor dysfunction in study participants.

III. Materials & Methods

- Study Design- A cross-sectional observational study
- At Department of obstetrics and gynaecology, HITECH MEDICAL COLLEGE & HOSPITAL, BHUBANESWAR.
- Study population – women attending OPD with symptoms suggestive of pelvic floor disorders were screened for eligibility.
- Study period – April 2025- September 2025
- Sample size- A total of 120 women fullfilling the inclusion criteria , taken informed consent.
- POP-Q examination to stage POP.
- Translated PFDI-20, PFIQ-7 questionnaire were administered.

Inclusion criteria

- Women aged ≥ 30 YR
- Symptomatic pelvic floor disorders.
- Clinically diagnosed pelvic organ prolapse (POP-Q stage ii-iv)

Exclusion criteria

- Prior pelvic surgery
- Pregnancy
- Neurological disorders affecting bladder and bowel function

Pelvic floor distress inventory -20 (PFDI-20)

- POPDI-6 (Pelvic organ prolapse distress inventory)

(Assess symptoms related to pelvic pressure, feeling bulge, falling out of vagina, pelvic heaviness, need to push back, difficult starting urine)

- **CRADI -8** (Colorectal Anal distress inventory)
(Evaluates bowel related symptoms including constipation, straining, incomplete evacuation, incontinence, pain during bowel movements, need to push)
- **UDI -6** (Urinary Distress Inventory)
(Measures urinary symptoms like frequency, urgency, urge incontinence, stress incontinence, difficulty in emptying, pain during urination)
- Each question scored using 5 point scale (0-4), domain scores are calculated and total score given (0-300)

Pelvic Floor impact Questionnaire -7(PFIQ-7)

- Assess how pelvic floor symptoms affect daily functioning & quality of life
- **UIQ-7** (Urinary Impact Questionnaire)
Measures the effect of urinary symptoms on physical activities, entertainment, travel, social activities, emotional well being, ability to do chores, participation in responsibilities.
- **CRAIQ-7** (Colorectal Anal Impact Questionnaire) Assesses how bowel symptoms affect all above
- **POPIQ-7** (Pelvic Organ Prolapse Impact Questionnaire) Assess impact of prolapse symptoms on all above
- Responses are scored on 4 point scale (0-3) , each domain scores converted to total score (0-300)

IV. Results

- A total of 120 women with pelvic organ prolapse were enrolled

	N= 120
Mean age	51.4+/- 7.2 years
Postmenopausal	82 (69%)
Multiparous (>= 3 vaginal births)	93 (78%)
Low socioeconomic status	86 (72%)
Mean BMI	26.3+/- 3.8kg/m2
Only Home deliveries	15

POP-Q staging	N=120
Stage ii	28(23.3%)
Stage iii	62(51.6%)
Stage iv	30(25%)

- PFDI-20 Domain scores (0-300)

Domain	Mean +/- SD
POPDI-6	68.5+/- 14.2
CRADI -8	55.2. +/- 12.8
UDI-6	74.3 +/- 15.1
Total PFDI -20 SCORE	198+/- 38

- PFIQ-7 DOMAIN SCORES (0-300)

Domain	Mean +/- SD
UIQ-7	72.1+/-16.4
CRAIQ-7	58.3+/- 14.9
POPIQ-7	63.4+/-15.7
Total score	193+/-42

Most distressing symptoms are urinary (UDI-6), most affected quality of life domain is UIQ-7

- Correlation between POP-Q stage and both scores

POP-Q STAGE	No of participants	Mean PFDI-20 SCORE	Mean PFIQ-7 score
Stage ii	28	142+/- 24	118+/-28
Stage iii	62	198 +/-30	184+/-33
Stage iv	30	245 +/- 26	238+/-31

Higher anatomical satge has worse symptoms with poorer quality of life

- Correlation Analysis

Variable	Correlation coefficient (r)	p- value	Interpretation
POP-Q vs PFDI-20	0.74	<0.001	Strong positive co relation
POP-Q vs PFIQ-7	0.71	<0.001	Strong positive co relation

V. Discussion

- In this study of 120 women with pelvic floor disorders, we found that both symptom burden and quality of life were substantial, as reflected by elevated PFDI-20, PFIQ-7 scores.
- Urinary symptoms were the most distressing domain, while urinary related functional limitation had the greatest impact on daily activities.
- More than three-fourths of women presented with advanced prolapse (POP-Q Stage iii and iv), indicating late presentation & possible underreporting of symptoms.
- A strong positive correlation was observed between POP-Q and both questionnaire scores ($r=0.74$ for PFDI-20 and $r=0.71$ for PFIQ-7), confirming that symptom severity and functional impairment increase with anatomical progression of prolapse.
- The study highlights that anatomical staging alone is insufficient to understand the patient's overall experience. Incorporating validated tools such as PFDI-20 & PFIQ-7 provides a more comprehensive assessment of disease impact and supports better treatment planning.

VI. Conclusion

- This study highlights a critical gap in women's health: pelvic floor disorders remain common, debilitating and often overlooked until symptoms severely disrupt daily life.
- By applying validated tools such as PFDI-20 and PFIQ-7, we captured the real life burden experienced by women – far beyond what clinical examination alone can reveal.
- The clear rise in symptoms scores with increasing POP-Q stage demonstrates that prolapse progression brings a measurable decline in well being.
- Early identification and patient centered evaluation are essential to prevent silent suffering and preserve quality of life.
- Empowering women through awareness, timely decision and tailored management can transform outcomes and restore functional independence.

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Patient Name: _____

Date: _____

Pelvic Floor Distress Inventory Questionnaire - Short Form 20

Please answer all of the questions in the following survey. These questions will ask you if you have certain bowel, bladder or pelvic symptoms and if you do how much they bother you. Answer each question by putting an **X** in the appropriate box or boxes. If you are unsure about how to answer, please give the best answer you can. While answering these questions, please consider your symptoms over the **last 3 months**.

		If yes, how much does it bother you?				
		Not at all	Somewhat	Moderately	Quite a bit	
1	Do you usually experience pressure in the lower abdomen?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Do you usually experience heaviness or dullness in the lower abdomen?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Do you usually have a bulge or something falling out that you can see or feel in the vaginal area?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Do you usually have to push on the vagina or around the rectum to have a complete bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Do you usually experience a feeling of incomplete bladder emptying?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Do you ever have to push up in the vaginal area with your fingers to start or complete urination?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Do you feel you need to strain too hard to have a bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Do you feel you have not completely emptied your bowels at the end of a bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Do you usually lose stool beyond your control if your stool is well formed?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PFDI- SF20

1

Kathy Y. Jones, MD

Patient Name: _____

Date: _____

		If yes, how much does it bother you?				
		Not at all	Somewhat	Moderately	Quite a bit	
10	Do you usually lose stool beyond your control if you stool is loose or liquid?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Do you usually lose gas from the rectum beyond your control?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Do you usually have pain when you pass your stool?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Do you experience a strong sense of urgency and have to rush to the bathroom to have a bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Does part of your stool ever pass through the rectum and bulge outside during or after a bowel movement?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Do you usually experience frequent urination	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Do you usually experience urine leakage associated with a feeling of urgency; that is, a strong sensation of needing to go to the bathroom?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Do you usually experience urine leakage related to laughing, coughing, or sneezing?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Do you usually experience small amounts of urine leakage (that is, drops)?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Do you usually experience difficulty emptying your bladder?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Do you usually experience pain or discomfort in the lower abdomen or genital region?	YES <input type="checkbox"/> NO <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PFDI- SF20

2

Kathy Y. Jones, MD

Pelvic Floor Impact Questionnaire—short form 7 (PFIQ-7)

Name _____ DATE _____

DOB _____

Instructions: Some women find that bladder, bowel, or vaginal symptoms affect their activities, relationships, and feelings. For each question, check the response that best describes how much your activities, relationships, or feelings have been affected by your bladder, bowel, or vaginal symptoms or conditions **over the last 3 months**. Please make sure you mark an answer in **all 3 columns** for each question.

How do symptoms or conditions in the following usually affect your	Bladder or urine	Bowel or rectum	Vagina or pelvis
1. Ability to do household chores (cooking, laundry, housecleaning)?	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit
2. Ability to do physical activities such as walking, swimming, or other exercise?	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit
3. Entertainment activities such as going to a movie or concert?	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit
4. Ability to travel by car or bus for a distance greater than 30 minutes away from home?	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit
5. Participating in social activities outside your home?	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit
6. Emotional health (nervousness, depression, etc)?	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit
7. Feeling frustrated?	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit	<input type="checkbox"/> Not at all <input type="checkbox"/> Somewhat <input type="checkbox"/> Moderately <input type="checkbox"/> Quite a bit