

# Frequency & Pelvic Symptoms in Women with Pelvic Organ Prolapse

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## ABSTRACT

**Aim:** To determine the frequency and symptoms of pelvic organ prolapsed in women with complaints of heaviness in pelvis and abnormal vaginal discharge.

**Study Design:** Cross-sectional/Observational study

**Place and Duration:** Study was conducted at Obstetrics and Gynecology department of Combined Military Hospital, Peshawar for six months duration from April, 2020 to September, 2020.

**Methodology:** Total 150 patients were presented in this study. Patients details demographics, age and body mass index were recorded after taking informed written consent. Patients were aged between 18-60 years. Patients who had complaints of heaviness in pelvis and abnormal vaginal discharge were enrolled. Frequency and pelvic symptoms in women with pelvic organ prolapse were measured by using Organ Prolapse Quantification System (POP-Q) at 3-stages. Complete data was analyzed by SPSS 22.0 version.

**Results:** Mean age of the patients was  $42.22 \pm 17.48$  years with mean BMI  $24.4 \pm 4.84$  kg/m<sup>2</sup>. Average time of labour was  $14.22 \pm 11.84$ . Frequency of pelvic organ prolapse at stage I was 19 (12.7%), at stage II was 82 (54.7%) and at stage III was 49 (32.7%). 85 (56.7%) women had multiparity, 55 (36.7%) had grand multiparity and 10 (6.7%) had primipara. Among menopausal status, frequency of pre-menopausal was 97 (64.7%) and post-menopausal status was among 53 (35.3%). Frequency of increased abdominal pressure was among 67 (44.7%) patients. Hormone replacement therapy was done among 13 (8.7%).

**Conclusion:** We concluded in this study that the danger of pelvic organ prolapse is clear from the abdominal pressure and overweight. Measures should be taken to deliver health care for women to reduce the burden of disease.

**Keywords:** Pelvic organ prolapse, POP-Q system, Menopausal status, Hormone replacement therapy, Abdominal pressure

## INTRODUCTION

A common gynecologic disorder linked to pelvic dysfunction of pelvic floors in women is pelvic organ prolapse (POP)[1]. This is the anomalous position of the pelvic organs in or outside the vagina, including the uterus, bladder, rectum and small intestine [2]. It may lead to surgical procedures which are one of the most common gynaecological operations in the general female population performed with a lifetime risk of 11–19% based on data from High Income Countries (HIC)[3, 4].

The prevalence and risk factors of low and middle-income POPs (LMIC) are much less well-known[5]. A study on Pelvic Floor Sturdy published in LMICs in 2011 found 13 studies with POP data ranging from 3.4 to 56.4%, a mean of 19.7%, but most studies were limited and not population-based, with differing meanings and POP methodologies [6]. A population based research (n=2070) which was not included in the UNFPA analysis in Nepal showed a 10 percent prevalence of women asking if they "were in the vagina"[7]. More recent Ethiopia[8] studies and Tanzania[10] have demonstrated a prevalence between 1% and 64.6% based on clinical exams (based on symptoms in the maternal health general studies).

Well known factors for POP are mainly focused on HIC results, including early delivery of forceps, long second phases of labour,[10] heavy-duty or hard-worked heartbeat and high infant birth weight[10], forceps, etc., and pregnancy and vaginal delivery[8]. In low and medium

compared to high-income countries, for example, high parity and younger ages at first-time delivery are usually more common and forceps and cesareans are less common. The distribution of these different risk factors vary. Our research was based on the lack of good data on POPs in LMIC's and Pakistan and difficult to determine the disease burden in women. Because rural areas are often neglected[10], research from these areas therefore need a comprehensive epidemiological study to help formulate strategies for providing adequate care.

## MATERIAL AND METHODS

This cross-sectional/observational study was conducted at Obstetrics and Gynecology department of Combined Military Hospital, Peshawar for duration of six months from April, 2020 to September, 2020 and comprised of 150 patients. Patients detailed demographics were recorded after taking written consent. Patients who had prolapse with malignancy, uterovaginal prolapse with pregnancy and those did not give written consent were excluded from this study.

Patients were aged between 18-60 years. Patients who had complaints of heaviness in pelvis and abnormal vaginal discharge were enrolled. Frequency and pelvic symptoms in women with pelvic organ prolapse were measured by using Organ Prolapse Quantification System (POP-Q) at 3-stages. Complete data was analyzed by SPSS 22.0 version.

**RESULTS**

Mean age of the patients was 42.22 ± 17.48 years with mean BMI 24.4 ± 4.84kg/m<sup>2</sup>. Average time of labour was 14.22 ± 11.84. 85 (56.7%) women had multiparity, 55 (36.7%) had grand multiparity and 10 (6.7%) had primipara. (table 1).

Frequency of pelvic organ prolapse at stage I was 19 (12.7%), at stage II was 82 (54.7%) and at stage III was 49 (32.7%). Among menopausal status, frequency of pre-menopausal was 97 (64.7%) and post-menopausal status was among 53 (35.3%). Frequency of increased abdominal pressure was among 67 (44.7%) patients. Hormone replacement therapy was done among 13 (8.7%). (table 2).

Table 1: Baseline details of enrolled cases

Variables	Frequency	% age
Mean age	42.22 ± 17.48	
Mean BMI	24.4 ± 4.84	
Average time of labour	14.22 ± 11.84	
<b>Parity</b>		
Multiparity	85	56.7
Grand multiparity	55	36.7
Primipara	10	6.7

Table 2: Frequency of factors leading to pelvic organ prolapse

Variables	Frequency	% age
<b>POP-Q System</b>		
Stage I	19	12.7
Stage II	82	54.7
Stage III	49	32.7
<b>Menopausal Status</b>		
Pre-menopausal	97	64.7
Post-menopausal	53	35.3
<b>Increase Abdominal Pressure</b>		
Yes	67	44.7
No	83	55.3
<b>HRT</b>		
Yes	13	8.7
No	137	91.3

**DISCUSSION**

Pelvic organ prolapse (POP) occurs if the pelvic floor tissue and muscles no longer sustain pelvic organ drops (prolapse) from the normal location of the pelvic organs. Vagina, cervix, uterus, bladder, urethra, and rectum belong to pelvic bodies. In the population-based research, the prevalence of POP is based on clinical analysis of symptomatic females aged 18 years and above. This bladder is the most frequently involved organ in pelvic organ prolapse. This prevalence corresponds to a Ghana population study[13]Mean age of the patients was 42.22 ± 17.48 years with mean BMI 24.4 ± 4.84kg/m<sup>2</sup>. Average time of labour was 14.22 ± 11.84. These were comparable to the previous some studies.[12]

Frequency and pelvic symptoms in women with pelvic organ prolapse were measured by using Organ Prolapse Quantification System (POP-Q) at 3-stages. Frequency of pelvic organ prolapse at stage I was 19 (12.7%), at stage II was 82 (54.7%) and at stage III was 49 (32.7%). Among menopausal status, frequency of pre-menopausal was 97 (64.7%) and post-menopausal status was among 53 (35.3%). Frequency of increased abdominal pressure was among 67 (44.7%) patients. The prevalence of POP by

POP-Q scenes in a populations-based Netherlands sample was as follows: stage zero (25.0%), stage I (36.5%), stage II (33%), stage III (5.0%) and stage IV (0.5 percent ) [13]. In a survey conducted by GarshasbiA,[14] he found: Stages 0 (47%); stage I (23.1%); stage II (18.3%) and stage III to be the total distribution of the pelvic prolapse of the organ (11.6 percent ). The following divisions in POP-Q stages were found in a study carried out by Kim CM[15]: stage II (25%), stage III (55%), stage IV (20 % ).

Hormone replacement therapy was done among 13 (8.7%) in present study. In this analysis, the tendency between POP and patient age was negligible. Likewise, the POP stage rate with parity, menopause status and HRT was also not important, whereas, statistics also showed +ve impact on the POP-Q phase with increased abdominal pressure (p=0,0005). In the Kim CM study[15], it has found that age, parity, menopause and HRT have significantly been correlated with the POP point, and parity increases with increasing severity by a statistically significant level. He found that POPs had major risk factors of age > 70 years, parity > 3 and menopausal status[15].

Two other recently performed research, one in Ethiopia with a varying prevalence, 395 women completing a questionnaire and 294 women having a symptomatic pelvic organ prolapse (do you feel bulging/pressure and something appearing through the vagina or you have a noticeable mass that rises through the vagina), is reported to have 6.3 per vagina.

Variation in the estimate of POP prevalence from 1- 64.6 percent in various studies due to different definitions of POP diagnostics, the use of different POP classification systems, the inclusion of different age groups and studies in rural and urban areas with different expectations. The research in Gambia, for example, was focused on the interview and evaluation of randomly selected women in a rural community, but categories of cases, including mild-uterine prolapse to the vagina, used to be diagnosed were requirements for POP diagnosis; moderate cervix visible outside of the introit and extreme uterine deterioration without use of the validated classification system [16].

POP risk factors are well established, including age, birth, traumatization, chronic intra-abdominal stress development, smoking, menopause, deficiency in oestrol, genetic factor, previous surgery, myopathy and collagene abnormalities [17-18]. POPs can also be affected by age, birth, trauma, and chronic intra-abdominal pressure increases (obesity. These risk factors vary from patient to patient and are subject to race impact. The exact etiology is not known but would definitely be multifactorial in uterovaginal prolapse. The severity of the prolapse is subject to various risks. [19-20]

**CONCLUSION**

We concluded in this study that the danger of pelvic organ prolapse is clear from the abdominal pressure and overweight. Measures should be taken to deliver health care for women to reduce the burden of disease.

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